Water Resources Data
Indiana
Water Year 1984

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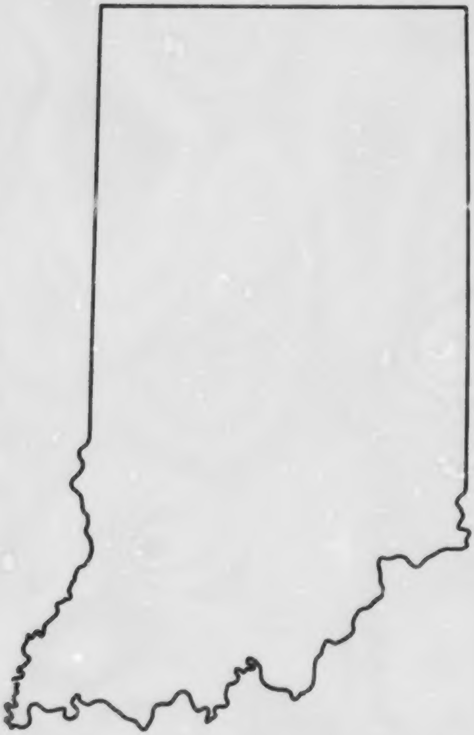

U.S. GEOLOGICAL SURVEY WATER DATA REPORT IN-84-1
Prepared in cooperation with the State of Indiana
and with other agencies

CALENDAR FOR WATER YEAR 1984

1983

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1984

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DEPARTMENT OF THE INTERIOR
March 3, 1849

1816

Water Resources Data
Indiana

Water Year 1984

by D.R. Glatfelter, J.A. Stewart, and G.E. Nell

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT IN-84-1
Prepared in cooperation with the State of Indiana
and with other agencies

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I

UNITED STATES DEPARTMENT OF THE INTERIOR

WILLIAM P. CLARK, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For additional information write to
District Chief, Water Resources Division
U.S. Geological Survey
6023 Guion Road Suite 201
Indianapolis, Indiana 46254

1985

PREFACE

This volume of the annual hydrologic data report of Indiana is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources.

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

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Prepared in cooperation with the State of Indiana and with other agencies.

16. Abstract (Limit: 200 words)

Water resources data for the 1984 water year for Indiana consists of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; and water levels in wells. This report contains discharge records for 185 gaging stations, stage and contents for 7 lake and reservoirs, releases from 7 flood control reservoirs, water quality for 5 gaging stations, and water levels for 83 observation wells. Also included are 24 crest-stage partial-record stations. Additional water data were collected at various sites, not part of the systematic data-collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Indiana.

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*Indiana, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rates, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperatures, Water levels, Water analyses.

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(w-discharge, c-chemical, t-temperature, s-sediment)

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INTRODUCTION

Water-resources data for the 1984 water year for Indiana consist of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; and water levels of ground-water wells. This volume contains records for water discharge at 185 gaging stations, stage and contents at one reservoir, releases from 7 flood-control reservoirs, water quality at 5 gaging stations, and water levels at 83 observation wells. Also included are data for 24 crest-stage parital-record stations. Locations of these sites are shown on figures 4, 5, and 6. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements. A systematic collection of stages on selected lakes was begun in 1943 in cooperation with the State of Indiana, Department of Natural Resources. For the 1984 water year, daily stage data were collected at 108 lakes. The data collected since the beginning of record have not been published in the annual water data reports for Indiana. They are available in the Indiana District Office. A selected amount of lake data was published in Water Supply Paper 1363 "Hydrology of Indiana Lakes" by J. I. Perrey and D. M. Corbett (1956). These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in Indiana.

Records of discharge and stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey Water-Supply Papers entitled, "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperature, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from the Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, Virginia, 22202.

For water years 1961 through 1970, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water- quality records for water years 1964 through 1970 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1971 water year, water data for streamflow, water quality, and ground water have been published in official Survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report IN-84-1." These water-data reports are for sale, in paper copy or in microfiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia, 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone (317) 927-8640.

COOPERATION

The U.S. Geological Survey and organizations of the State of Indiana have had cooperative agreements for the systematic collection of streamflow records since 1930, for ground-water levels since 1940, for lake stages since 1943, and for water-quality records since 1951. Organizations that supplied data are acknowledged in station descriptions. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

State of Indiana, Department of Natural Resources, James M. Ridenour, Director, through Bureau of Water and Mineral Resources, W. J. Andrews, Deputy Director.

Indiana State Board of Health, R. G. Blankenbaker, M.D., Commissioner, and Ralph C. Pickard, Assistant Commissioner for Environmental Health.

Indiana Department of Highways, John P. Isenbarger, Director

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, in collecting records for surface-water gaging stations and water-quality gaging stations published in this report.

The following organizations aided in collecting records: The cities of Columbus, Fort Wayne, and Indianapolis; Indianapolis Water Co., Indianapolis Power and Light Co., Public Service Co. of Indiana, Container Corporation of America, Northern Indiana Public Service Company, Hoosier Energy, and Sheller-Globe Corporation.

SUMMARY OF HYDROLOGIC CONDITIONS

Average annual rainfall across Indiana ranges from about 36 inches in the north (except for an area along Lake Michigan, which receives approximately 40 inches), to over 44 inches in the south (National Oceanic and Atmospheric Administration, 1951-80). Precipitation occurs in each month of the year, but the spring months are usually the wettest through out the State. Losses do to evaporation and transpiration are more uniform across the State; and is approximately two-thirds of precipitation. Annual runoff is approximately one-third of precipitation.

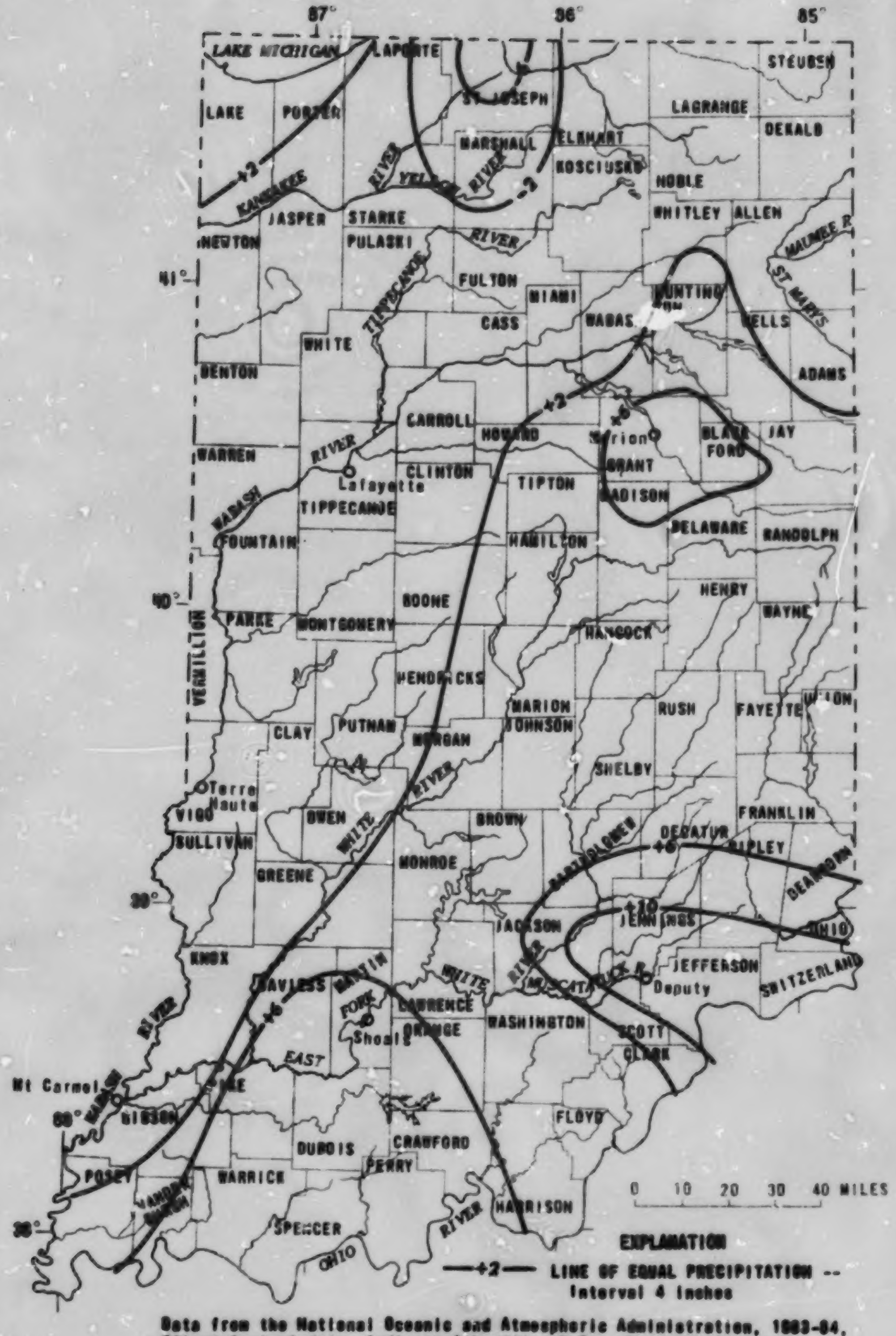
Precipitation for water year 1984 was compared to that for the 30-year period 1951-80; departure from normal is shown in figure 1. The southern and southeastern parts of the State received 6 to 14 inches more precipitation than normal. North-central and west-central Indiana was slightly below normal for the water year.

Inches of runoff for water year 1984 was compared to that for the 30-year period 1951-80; departure from normal is shown in figure 2. Runoff was near normal in most of the State, but was slightly above normal in the northeastern and southwestern parts of the State.

The 1984 water year began with above-normal precipitation across the State. The October monthly mean streamflow at each of the three index stations (Mississinewa River at Marion, Wabash River at Mount Carmel and East Fork White River at Shoals) was above the median of monthly mean discharges for 1951-80 (fig. 3). (By using the median of monthly mean discharge, the weighting caused by extreme high or low flows is excluded. The result is a better representation of probable monthly flow.) Rains of 3 to 5.5 inches on October 20 caused localized flooding along small streams in south-central and southeastern Indiana. By October 22, the Muscatatuck River at Deputy had risen nearly 19 feet. Fulton 7 (records since 1967) was among the several ground-water wells across the State that set new all-time-low water levels, as a result of the drying trend from July through September.

Precipitation in November also was above normal. Rains during the first 3 weeks of the month kept discharges above their monthly medians. During the last week of the month, rainfall ranged from 1 to 5 inches across the State. The maximum rainfall was recorded in the southwestern part of the State, where lowlands along the lower parts of the White and Wabash Rivers were flooded. Statewide, ground-water levels tended to rise in November; this trend continued through April.

In December, precipitation was above normal. During the second week of December, lowland flooding occurred along parts of the St. Marys and Maumee Rivers in northeastern Indiana and along lower parts of the White River in south-central Indiana. A deep freeze throughout the State after December 15 caused streamflows to decline as water went into temporary storage as ice.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Shoals
ORANGE
WASHINGTON
SCOTT
CLARK
EAST
Mt Carmel
PIKE
GIBSON
FLOYD
DUBOIS
CRAWFORD
POSEY
WARRICK
PERRY
VANDERBURGH
HARRISON
SPENCER
OHIO
RIVER
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-2
+6
+10
0 10 20 30 40 MILES
EXPLANATION
—+2— LINE OF EQUAL PRECIPITATION -- Interval 4 inches

Data from the National Oceanic and Atmospheric Administration, 1983-84, Climatological data, Indiana: Asheville, N.C., National Climatic Center, v. 88, nos. 10-12, and v. 89, nos. 1-9.

Figure 1.— Departure of precipitation from normal in Indiana, October 1983 to September 1984.

Below-normal temperature and precipitation were recorded across the State in January. Therefore, streamflows continued to decline throughout the month. At the three index stations, the mean monthly streamflows were less than the 30-year median streamflow.

Precipitation in Indiana for February was near normal, and mean temperatures were much above normal. Accumulated snow began to melt during the second week of February. This snowmelt and a light rain caused flooding in the lowlands along parts of the Yellow, Kankakee, White, Wabash and Maumee Rivers that lasted from 1 day to 2 weeks. Flooding was most intensive along the Wabash River from Lafayette to Terre Haute where flood crests were from 4 to 8 feet above flood stage. Temperatures and precipitation were above normal across the State in March. Rain on snow on March 15 caused streams across the State to rise quickly. Lowlands along the St. Marys, Maumee, East Fork White, White, and Wabash Rivers were flooded. Flood crests on these streams did not exceed those of February. A record-high ground-water level was recorded at Grant 8 (15 years of record).

Rainfall for April ranged from below normal in northern Indiana to above normal in southern Indiana. Heavy rains were recorded across the State during the third week of the month; as much as 5 inches was recorded in southwestern Indiana. Flooding along the East Fork White, White, and Wabash Rivers was the highest since May 1983.

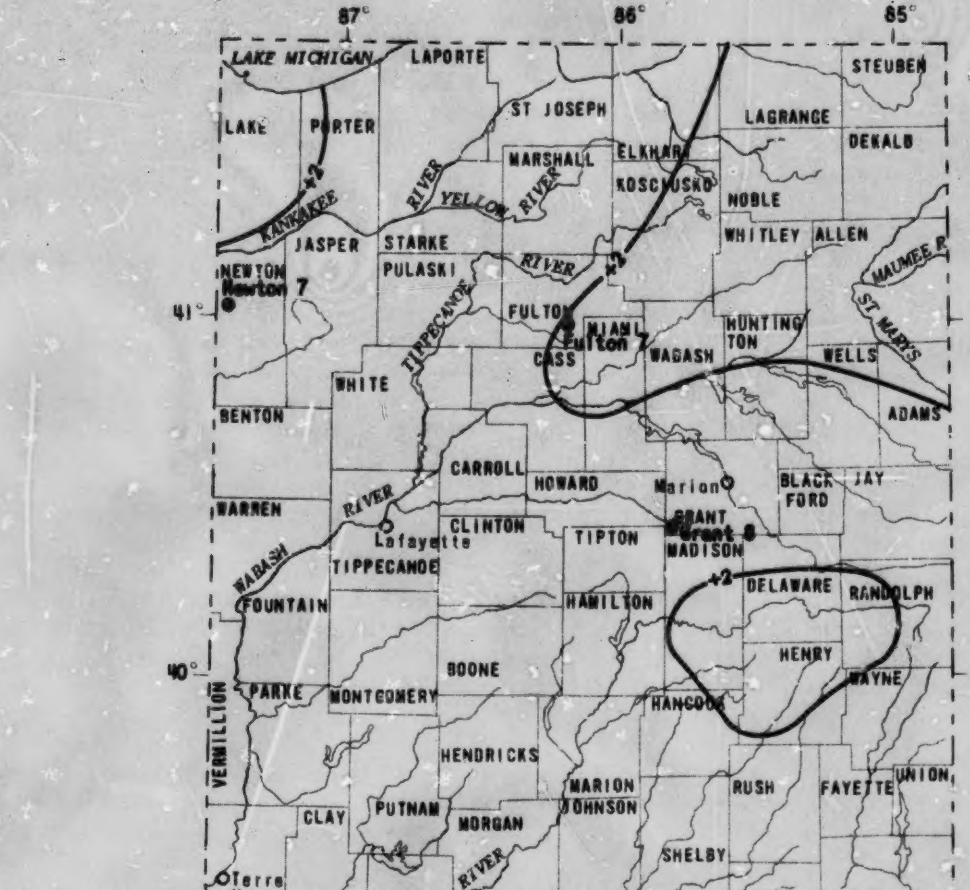
Rainfall was above normal at most Indiana locations in May. Three rain events (from May 21-25) caused lowland flooding along parts of the Wabash, Tippecanoe, and Kankakee Rivers. Ground-water levels gradually declined through the rest of the water year.

Precipitation was below normal for most of Indiana in June. As a result, streamflows declined to near or to below their median monthly values.

Monthly rainfall totals for July ranged from below to above normal. Rainfall was scattered, and discharge in most streams across the State continued to decline.

Rainfall totals for August were below normal for much of Indiana. Soil moisture and streamflow declined throughout the month. At the three index stations, the monthly mean was below the 30-year median streamflow. Record low water-level records were recorded at several wells in Newton and Lake Counties including Newton 7 (records since 1976).

Rainfall was above normal across most of Indiana in September. Because of the dry soil, most of the rain was stored as soil moisture. Thus, little runoff was recorded, and streamflows across the State remained below their monthly medians. Ground-water levels Statewide were higher than those in October 1983.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ST MARYS
TIPPECANOE
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MIAMI
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HUNTINGTON
CASS
WABASH
WELLS
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BENTON
ADAMS
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HOWARD
Marion
BLACKFORD
JAY
WARREN
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TIPTON
MADISON
TIPPECANOE
WABASH
DELAWARE
RANDOLPH
FOUNTAIN
HAMILTON
HENRY
BOONE
WAYNE
VERMILLION
PARKE
MONTGOMERY
HANCOCK
HENDRICKS
UNION
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CLAY
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RIVER
Terre Haute
VIGO
OWEN
WHITE
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FRANKLIN
SULLIVAN
BARTHOLOMEW
DECATUR
RIPLEY
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DEARBORN
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LAWRENCE
WASHINGTON
Shoals
ORANGE
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CLARK
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DUBOIS
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PERRY
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EXPLANATION
+2 LINE OF EQUAL RUNOFF -- Interval 4 inches
Grant 6 GROUND-WATER WELL AND DESIGNATION

Data from U.S. Geological Survey:
Water-Resources Data - Indiana
Water years 1951-80

Figure 2.— Departure of runoff from normal in Indiana, October 1983 to September 1984.

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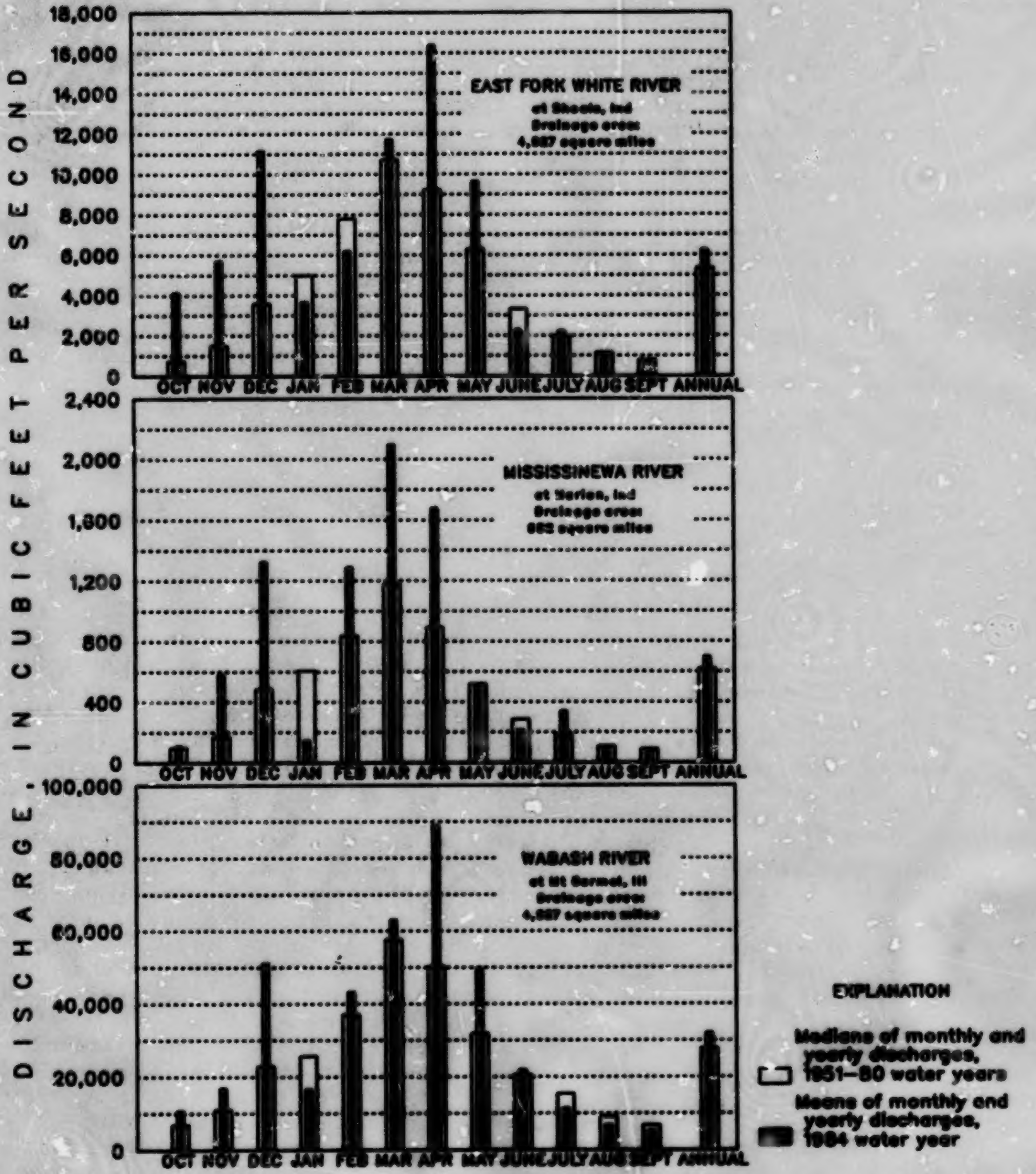

Figure 3. —— Mean discharges at Indiana index stations during 1984 water year and median discharges for period 1951–80.

SPECIAL NETWORK

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

DOWNSTREAM ORDER AND STATION NUMBER

Stations are listed in a downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the lists of gaging stations and water-quality stations in the front of this report the rank of tributaries is indicated by indention, each indentation representing one rank.

As an added means of identification, each gaging station, partial-record station, and water-quality station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and gaging stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station, such as 03335500, which appears just to the left of the station name, includes the 2-digit part number "03" plus the 6-digit downstream order number "335500." In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines.

Records in this report are in Part 3 (Ohio River basin), Part 4 (St. Lawrence River basin) and Part 5 (Upper Mississippi River basin). All records for drainage basin encompassing more than one State can be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

NUMBERING SYSTEM FOR WELLS

Ground-water wells are listed alphabetically by counties in this report. Each well in Indiana carries dual-identification numbers. The first system is by a county name with a sequential number of the well, that is, number one is the first well in that county for which records were obtained. The second system is based on the latitude and longitude of the well. An additional identification of the well in this system is given following the seconds of longitude. Each well within the boundary of a particular second of latitude and longitude is numbered by tenths of a unit, with the first established well numbered as ".1".

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from direct readings on a non-recording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6. Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is determined by sounding at many points.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-back water techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity tables gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents is given. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the current water year is shown on the reverse side of the back cover to facilitate finding the day of the week for any date.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use; the datum of the present gage referred to National Geodetic Vertical Datum, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS" on page 21.

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS." For reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE", it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. Under "EXTREMES" are given, first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with EXTREMES FOR THE CURRENT YEAR; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion.

In the yearly summary below the monthly summary, the figures following "MAX" are the maximum daily discharges for the calendar and water years; likewise, those following "MIN" are the minimum daily discharges.

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents.

Data collected at partial-record stations and miscellaneous sites are given in tables at the end of the surface-water records in this report.

Accuracy of data

The accuracy of discharge data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretation of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good" within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft^3/s; to tenths between 1.0 and 10 ft^3/fs; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other data available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge measurements, gage-height records, and rating tables, is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Publications

In each water-supply paper entitled, "Surface Water Supply of the United States: there is a list of numbers of preceding water-supply papers containing streamflow information for the area covered by that report. In addition, there is a list of numbers of water-supply papers containing detailed information on major floods in the area. Records for stations in Indiana for the period October 1960 to September 1965 are in Water-Supply Papers 1908, 1909, 1911, 1912, and 1915.

Two series of summary reports entitled, "Compilation of Records of Surface Waters of the United States" have been published; the first series covers the entire period of record through September 1950 and the second series covers the period October 1950 to September 1960. These reports contain summaries of monthly and annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station. Records for stations in Indiana are compiled in Water-Supply Paper 1305, 1307, and 1308 through September 1950, and in 1725, 1727, and 1728 for October 1950 to September 1960.

Special reports on major floods or droughts or of other hydrologic studies for the area have been issued in publications other than water-supply papers. Information relative to these reports may be obtained from the district office.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and examination of data

Surface-water samples for analyses usually are collected at or near gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

Descriptive statements are given for water-quality stations located at or near streamflow stations. Given are location, drainage area, periods of record for the various water-quality data, extremes of pertinent data, and general remarks, within the format for streamflow gaging stations.

Water-quality information is presented for chemical quality, biological, microbiological, water temperature, and fluvial sediment. Chemical quality includes concentrations of individual dissolved constituents and certain properties or characteristics such as hardness, sodium-adsorption-ratio, specific conductance, and pH. The biological information includes qualitative and quantitative analyses of plankton, bottom organisms, and particulate inorganic and amorphous matter present. Microbiological information includes quantitative identification of certain bacteriological indicator organisms. Water-temperature data represent once-daily observations except for stations where a continuous-temperature recorder furnished information from which daily minimums and maximums are obtained. Fluvial-sediment information is given for suspended-sediment discharges and concentrations, and for particle-size distribution of suspended sediment and bed material.

Prior to the 1968 water year, data for chemical constituents and concentration of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967 the U.S. Geological Survey began to use the metric system; data for chemical constituents and concentrations of suspended sediment are now reported in milligrams per liter (mg/L), and water temperatures are given in degrees Celsius (centigrade, °C). In waters with a density of 1.000 g/mL (grams per milliliter), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/mL, values in parts per million should be multiplied by the density to convert to milligrams per liter. To convert temperatures in degrees Celsius to degrees Fehrenheit, see table 1 on page 18.

In October 1968 the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per liter instead of milligrams per liter. (See "Definition of Terms," p. 21).

Water analysis

The methods of collecting and analyzing water samples for determining the kinds of concentrations of solutes are described by Skougstad, Fishman, Friedman, Erdmann, and Duncan, eds. (1979). One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled at several verticals across the channel to determine accurately the solute load.

At chemical quality stations where monitors are installed, the records consist of daily maximum, minimum, and mean values for each constituent measured. More detailed records (hourly values) may be obtained from the district office of the U.S. Geological Survey at the address given on the back of the title page of this report.

Water temperature

Water temperatures are measured at most of the water-quality stations. For daily stations, the water temperatures are taken about the same time each day when sample is collected. Large streams have a small diurnal temperature change while small, shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where continuously recording thermographs are present, the records consist of maximum and minimum temperatures for each day and the monthly averages.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the sub-divided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the sub-divided day method. For periods when no samples are collected, daily loads of suspended sediment are estimated on the basis of water discharge, sediment concentrations observe immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples are collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observation, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

Table 1.--Degrees Celsius (°C) to degrees Fahrenheit (°F)*
Temperature reported to nearest 0.5° C

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

*°C = 5/9 (°F −32) or °F = 9/5 °C +32.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

Only ground-water level data from a basic network of observation wells are published herein. These water-level measurements are intended to provide a sampling and historical record of water-level changes in the nation's most important aquifers.

Measurements are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well insure that measurements at each well are of consistent accuracy and reliability.

Water-level measurements in this report are given in feet with reference to either mean sea level (msl) or land-surface datum (lsd). Mean sea level is the datum plane on which the national network of precise levels is based; land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum above mean sea level is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. The highest water levels in wells equipped with recording gages are reported for every fifth day and the end of each month. At the bottom of these tables are shown the minimum and maximum recorded water levels for the month and the minimum and maximum recorded water levels for the current water year.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

ACCESS TO WATSTORE DATA

The National WATer Data STOrage and REtrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from each of the Water Resources Division's district offices (see address given on the back of the title page).

General inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, Virginia 22092

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined as follows. See also table for converting inch-pound units to International System of units (SI) on inside of front cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5° C ± 0.2° C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35° C ± 1.0° C on M-enterrococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100-ml sample.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, used for the decomposition of organic matter by micro-organisms, such as bacteria.

Clock time (24 hour) Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330.

Cubic feet per second per day $(ft^3/s)/day$ is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, or about 646,000 gallons, and represents a runoff of approximately 0.0372 inch from 1 square mile.

Color unit is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic foot per second per square mile $(ft^3/s)/mi^2$, cfsm) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (ft^3/s, cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, total fluids), that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic average of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time. If this discharge is reported instead of the daily mean, the heading of the discharge column in the tables is "Discharge (ft^3/s)".

Dissolved.—That material in a representative water sample which passes through a 0.45 mm membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein may include an estimate of that portion of the total drainage area which does not contribute directly to surface runoff.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Hardness of water is a physical-chemical characteristic attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distant hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrolgic unit is identified by an 8-digit number.

Microgram per liter (µg/L, µG/L) is a unit expressing the concentration of chemical constituents in solution as the weight (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligram per liter (mg/L, MG/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the weight of solute per unit volume of water. Milligrams or micrograms per liter may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per liter by multiplying by the factors in table 2, page 27. Concentration of suspended sediment also is expressed in mg/L, and is based on the weight of sediment per liter of water-sediment mixture. Sediment concentrations may be converted to parts per million by using the factors in table 3, page 27.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Partial-record station is a particular site where limited streamflow or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay............	0.00024 - 0.004	Sedimentation.
Silt............	.004 - .062	Sedimentation.
Sand............	.062 - 2.0	Sedimentation or sieve.
Gravel..........	2.0 - 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells/mL of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells/mL of sample.

Runoff in inches (IN) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons per day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or by volume, that is discharged in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Total-sediment discharge or total sediment load is the sum of the suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight or volume, that is discharged during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the so[illegible] This ratio should be known especially for water used for irrigating farmland.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25° C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids concentrations in the water. Commonly, the amount of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos/cm at 25° C). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

Stage discharge relation is the relation between gage height and the volume of water per unit of time, flowing in a channel.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the presence of a thermograph or a digital mechanism that automatically records water temperatures on paper tape.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour day.

Total (as used in tables of chemical analyses) refers to the amount of a substance that is present both in solution and in suspension. Analyses are performed on representative samples of water-suspended sediment mixtures.

WDR is used as an abbreviation for "Water Data Report" in the REVISED RECORD paragraph to refer to previously published State annual basic-data reports.

WSP is used as an abbreviation for "Water-Supply Paper" in reference to previously published reports.

Table 2.--Factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents per liter

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})	0.11119	Iodide (I^{-1})	0.00788
Ammonia as NH_4^{+1}	.05544	Iron (Fe^{+3})*	.05372
Barium (Ba^{+2})	.01456	Lead (Pb^{+2})*	.00965
Bicarbonate (HCO_3^{-1})	.01639	Lithium (Li^{+1})*	.14411
Bromide (Br^{-1})	.01251	Magnesium (Mg^{+2})	.08226
Calcium (Ca^{+2})	.04990	Manganese (Mn^{+2})*	.03640
Carbonate (CO_3^{-2})	.03333	Nickel (Ni^{+2})*	.03406
Chloride (Cl^{-1})	.02821	Nitrate (NO_3^{-1})	.01613
Chromium (Cr^{+6})*	.11539	Nitrite (NO_2^{-1})	.02174
Cobalt (Co^{+2})*	.03394	Phosphate (PO_4^{-3})	.03159
Copper (Cu^{+2})*	.03148	Potassium (K^{+1})	.02557
Cyanide (CN^{-1})	.03844	Sodium (Na^{+1})	.04350
Fluoride (F^{-1})	.05264	Strontium (Sr^{+2})*	.02283
Hydrogen (H^{+1})	.99209	Sulfate (SO_4^{-2})	.02082
Hydroxide (OH^{-1})	.05880	Zinc (Zn^{+2})*	.03060

*Constituent reported in micrograms per liter; multiply by factor and divide results by 1,000.

Table 3.--Factors for conversion of sediment concentrations in milligrams per liter to parts per million*
(All values calculated to three significant figures)

Range of concentration in 1,000 mg/L	Divide by	Range of concentration in 1,000 mg/L	Divide by	Range of concentration in 1,000 mg/L	Divide by	Range of concentration in 1,000 mg/L	Divide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-508	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

*Based on water density of 1.000 g/mL and a specific gravity of sediment of 2.65.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-seven manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 604 South Pickett St., Alexandria, VA 22304 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations".

1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.

3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A9. *Measurement of time of travel and dispersion in streams by dye tracing*, by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 pages.

3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.

3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.

4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.

4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.

5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.

5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.

5-A3. *Methods for analysis of organic substances in water*, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.

5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.

5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

7-C3. *A model for simulation of flow in singular and interconnected channels*, by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.

8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages

8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

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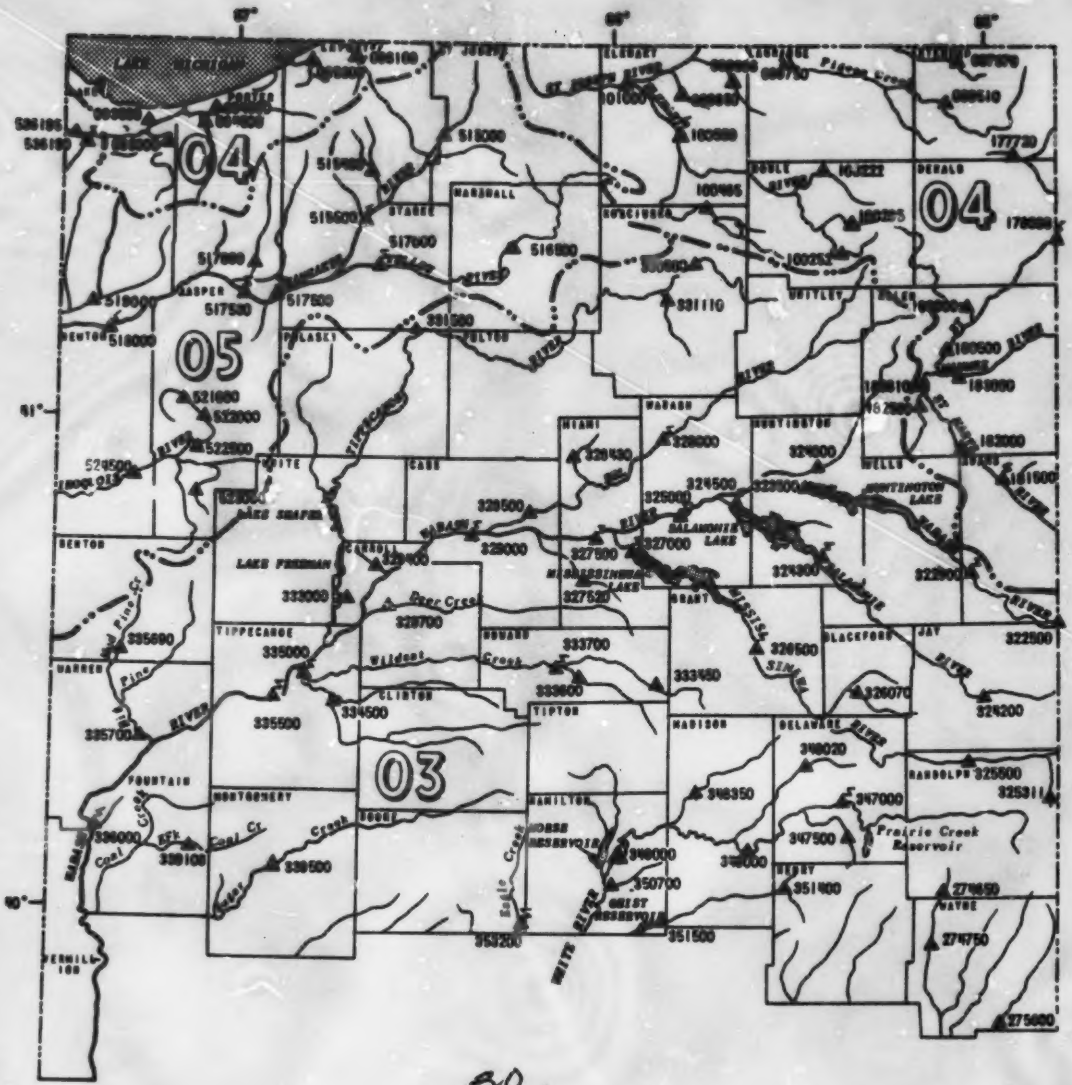
Rantz, S. E., and others, 1982, Volume 2, Computation of discharge: U.S. Geological Survey Water-Supply Paper 2175, 631 p.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WHITLEY
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JASPER
NEWTON
PULASKI
FULTON
WABASH
MIAMI
HUNTINGTON
WELLS
ADAMS
WHITE
CASS
CARROLL
BENTON
TIPPECANOE
HOWARD
GRANT
BLACKFORD
JAY
WARREN
CLINTON
TIPTON
MADISON
DELAWARE
RANDOLPH
FOUNTAIN
MONTGOMERY
BOONE
HAMILTON
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ST JOSEPH RIVER
Pigeon Creek
KANKAKEE RIVER
YELLOW RIVER
TIPPECANOE RIVER
EEL RIVER
WABASH RIVER
SALAMONIE LAKE
SALAMONIE RIVER
MISSISSINEWA LAKE
MISSISSINEWA RIVER
HUNTINGTON LAKE
LAKE SHAFER
LAKE FREEMAN
Deer Creek
Wildcat Creek
Big Pine Cr
Pine Creek
Coal Cr
Sugar Creek
Eagle Creek
MORSE RESERVOIR
GEIST RESERVOIR
WHITE RIVER
Prairie Creek Reservoir
ST MARYS RIVER
536186
536190
518000
519000
517530
517500
517000
516500
515600
519500
518000
521000
522000
522500
524500
523000
331500
331110
100500
101000
100000
100465
101222
100225
100252
177720
178000
180500
183000
181000
182500
182000
181500
328000
326430
324000
324500
325000
323500
329500
327500
327000
327520
329000
329400
333000
328700
333700
333800
333450
326500
326070
324300
322900
322500
324200
335000
335690
334500
335500
335700
336000
339100
339500
348350
348020
347000
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350700
351500
353200
348000
351400
325500
325311
274850
274750
275000

30.

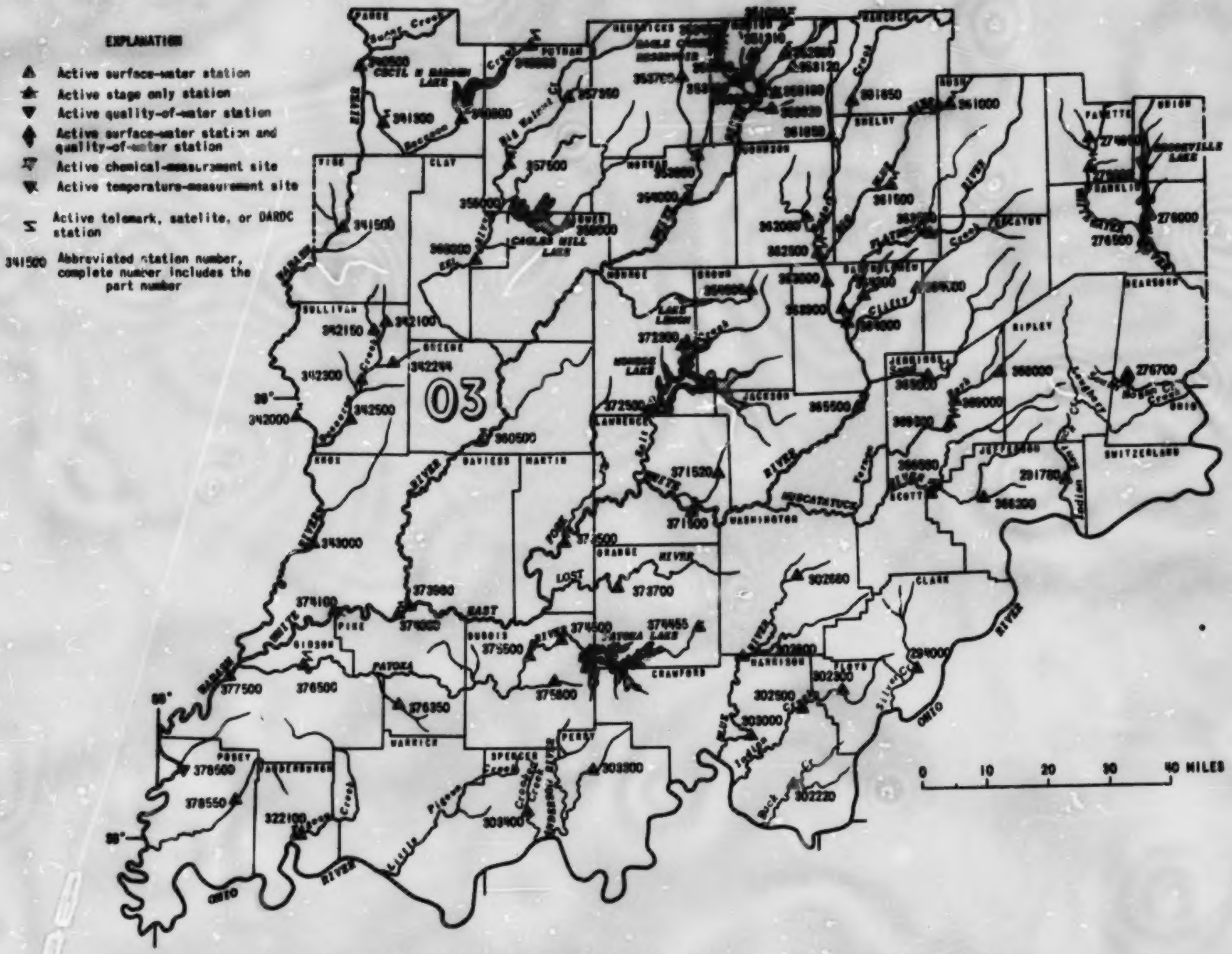
EXPLANATION
▲ Active surface-water station
★ Active stage only station
▼ Active quality-of-water station
◆ Active surface-water station and quality-of-water station
Active chemical-measurement site
Active temperature-measurement site
Σ Active telemark, satelite, or DARDC station
341500 Abbreviated station number, complete number includes the part number
03
0 10 20 30 40 MILES
39°
38°
OHIO RIVER
WABASH RIVER
WHITE RIVER
EAST
PATOKA
LOST RIVER
MUSCATATUCK
BLUE RIVER
EEL RIVER
CAGLES MILL LAKE
MONROE LAKE
LAKE LEMON
PATOKA LAKE
BROOKVILLE LAKE
CECIL M HARDEN LAKE
EAGLE CREEK RESERVOIR
PARKE
PUTNAM
HENDRICKS
HANCOCK
SHELBY
RUSH
FAYETTE
UNION
FRANKLIN
DECATUR
JOHNSON
MORGAN
OWEN
CLAY
VIGO
SULLIVAN
GREENE
MONROE
BROWN
BARTHOLOMEW
JACKSON
JENNINGS
RIPLEY
DEARBORN
OHIO
SWITZERLAND
JEFFERSON
SCOTT
CLARK
FLOYD
HARRISON
WASHINGTON
LAWRENCE
ORANGE
CRAWFORD
MARTIN
DAVIESS
KNOX
PIKE
DUBOIS
GIBSON
POSEY
VANDERBURGH
WARRICK
SPENCER
PERRY
340500
341300
340800
357950
357500
358000
360000
360500
341500
342100
342150
342244
342300
342500
342000
343000
374100
373980
374000
373500
373700
374500
374455
375500
375800
376350
376500
377500
378500
378550
322100
303400
303300
302220
303000
302500
302300
302800
302680
294000
291780
366200
366000
365500
368000
369000
369500
276700
276500
276000
371520
371500
372500
372300
364000
363900
364500
363000
362500
363080
361500
361000
361850
364000
357000
358000

Figure 4.-- Location of stream-flow and water-quality gaging stations in Indiana.

03274650 WHITEWATER RIVER NEAR ECONOMY, IN

LOCATION.--Lat 40°00'05", long 85°06'56", in NW¼NE¼ sec.19, T.18 N., R.13 E., Wayne County, Hydrologic Unit 05080003, on right bank 6 ft downstream from bridge on Wayne County Line Road, 1.7 miles upstream from Little Creek, 2.4 miles northwest of Economy, and at mile 91.9.

DRAINAGE AREA.--10.4 mi^2.

PERIOD OF RECORD.--October 1970 to current year.

REVISED RECORDS.--WRD IN 83-1: 1982.

GAGE.--Water-stage recorder. Datum of gage is 1,066.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good above 1.0 ft^3/s and poor below.

AVERAGE DISCHARGE.--14 years, 10.8 ft^3/s, 14.10 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,100 ft^3/s Aug. 20, 1979, gage height, 8.85 ft; minimum daily, 0.28 ft^3/s Jan. 17, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 16	0300	542	6.90
Apr. 22	0900	*569	*7.01

Minimum daily discharge, 0.40 ft^3/s Oct. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.42	.60	7.8	2.9	2.1	6.6	11	9.7	4.7	1.4	.87	.67
2	.40	.70	6.5	2.7	13	6.0	9.4	9.1	4.4	1.4	.93	.67
3	.40	1.0	5.6	2.7	92	5.7	12	10	4.0	1.4	.93	.87
4	.50	1.1	33	2.9	21	5.1	20	10	3.8	4.4	.93	.60
5	.90	1.0	34	2.7	12	8.5	65	8.5	3.8	12	1.0	.60
6	.60	.88	50	2.7	6.4	14	42	8.2	3.8	12	1.0	.55
7	.50	.80	28	2.6	4.7	11	24	7.9	3.2	6.5	.93	.55
8	.45	.71	16	2.6	3.7	9.5	16	8.0	3.2	4.0	.93	.50
9	.52	.63	12	2.4	9.2	12	13	7.3	3.2	2.7	1.0	.67
10	.48	2.8	11	2.4	63	7.6	11	6.5	3.2	2.4	.93	1.0
11	.46	28	85	2.2	57	5.9	9.5	6.3	3.1	2.2	.93	.67
12	.60	11	104	2.0	38	5.0	9.0	6.4	2.9	1.7	.93	.60
13	1.2	4.5	45	2.1	34	5.4	10	5.8	2.9	1.6	.93	.55
14	.90	2.5	38	2.1	22	5.7	11	5.2	2.9	1.4	.87	.67
15	.70	19	30	2.0	15	35	14	4.7	2.4	1.4	.80	.60
16	.64	26	17	2.0	12	249	37	4.4	2.6	1.3	.80	.60
17	.60	10	11	2.0	11	73	46	4.2	2.4	1.2	.87	.55
18	.70	5.0	8.6	1.8	9.6	47	38	4.0	2.4	1.2	1.0	.55
19	.64	3.1	7.0	1.6	11	36	29	3.8	2.4	1.2	.93	.55
20	1.4	6.6	6.2	1.5	8.3	75	30	11	2.3	1.2	.87	.50
21	1.7	8.3	6.2	1.4	7.0	52	20	26	2.2	1.2	.87	.50
22	3.8	3.8	11	1.5	6.1	38	192	13	2.2	1.2	1.0	.55
23	5.8	39	6.2	2.2	5.6	39	81	46	2.4	1.2	1.0	1.1
24	2.2	36	4.0	3.7	5.5	36	52	21	2.4	1.1	.87	1.6
25	1.3	14	3.5	5.0	8.6	57	37	13	1.8	1.2	.80	3.2
26	.94	6.9	3.7	15	11	42	28	10	1.7	1.2	.80	4.0
27	.86	10	3.8	9.3	10	29	20	7.8	2.0	1.2	.80	1.3
28	.86	66	3.8	3.5	7.5	24	14	7.2	1.8	1.2	.93	.87
29	.76	25	3.4	2.8	6.5	20	12	6.5	1.6	1.0	.87	.67
30	.71	12	2.9	2.4	---	15	12	5.8	1.5	.93	.87	.55
31	.64	---	2.7	2.2	---	12	---	5.1	---	.87	.80	---
TOTAL	32.58	346.92	606.9	94.9	512.8	987.0	924.9	302.4	83.2	74.90	27.99	26.86
MEAN	1.05	11.6	19.6	3.06	17.7	31.8	30.8	9.75	2.77	2.42	.90	.90
MAX	5.8	66	104	15	92	249	192	46	4.7	12	1.0	4.0
MIN	.40	.60	2.7	1.4	2.1	5.0	9.0	3.8	1.5	.87	.80	.50
CFSM	.10	1.12	1.89	.29	1.70	3.06	2.96	.94	.27	.23	.09	.09
IN.	.12	1.24	2.17	.34	1.83	3.53	3.31	1.08	.30	.27	.10	.10

CAL YR 1983 TOTAL 2903.60 MEAN 7.96 MAX 144 MIN .40 CFSM .77 IN 10.38
WTR YR 1984 TOTAL 4021.35 MEAN 11.0 MAX 249 MIN .40 CFSM 1.06 IN 14.38

03274750 WHITEWATER RIVER NEAR HAGERSTOWN, IN

LOCATION.--Lat 39°52'25", long 85°09'47", in NE¼NE¼ sec.3, T.16 N., R.12 E., Wayne County, Hydrologic Unit 05080003, on left bank at downstream side of bridge on Jerry Meyers Road, 1.0 mile upstream from Pronghorn Run, 1.5 miles north of Interstate 70, 2.0 miles downstream from Nettle Creek, 2.6 miles south of Hagerstown, and at mile 84.9.

DRAINAGE AREA.--58.7 mi².

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 950.00 ft National Geodetic Vertical Datum of 1929 (Indiana Flood Control and Water Resources Commission bench mark).

REMARKS.--Records good, except those for period of no gage-height record, which are poor.

AVERAGE DISCHARGE.--14 years, 67.9 ft³/s, 15.71 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,300 ft³/s Jan. 26, 1976, gage height, 10.89 ft; maximum gage height, 11.24 ft Aug. 1, 1979; minimum daily discharge, 5.3 ft³/s Aug. 5, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1200 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 16	1000	1510	9.28
Apr. 22	1500	*1700	*9.83

Minimum daily discharge, 7.4 ft³/s Oct. 2

Note--No gage-height record Jan. 12 to Mar. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	15	58	33	28	48	84	85	53	24	18	11
2	7.4	17	53	32	50	50	79	81	51	24	18	11
3	8.2	19	49	32	350	45	85	87	48	24	19	14
4	9.8	18	103	33	160	42	117	85	47	63	19	13
5	16	16	117	33	80	52	399	77	45	96	19	13
6	11	16	163	33	60	74	211	77	44	70	18	12
7	10	16	108	32	40	62	130	74	43	49	17	11
8	9.3	15	78	32	35	55	107	75	43	39	17	11
9	9.3	15	66	32	40	48	96	69	41	35	17	11
10	10	40	63	32	250	47	85	67	39	33	29	15
11	10	84	290	30	170	45	79	64	38	30	25	13
12	12	52	507	31	120	44	75	63	36	28	19	12
13	23	40	173	29	115	46	81	58	36	27	18	11
14	16	35	147	27	110	45	83	56	36	24	18	20
15	12	61	129	25	82	114	88	53	35	24	17	14
16	12	82	92	25	70	947	167	50	34	24	17	12
17	12	54	77	25	65	272	212	46	33	23	19	13
18	13	44	68	25	60	177	180	48	32	23	19	13
19	12	39	64	18	62	140	129	47	32	22	17	12
20	18	41	60	17	60	331	120	93	31	23	16	11
21	21	47	60	17	54	234	104	160	30	22	16	11
22	26	40	75	18	49	171	869	110	30	20	17	11
23	23	152	58	20	46	169	399	238	41	20	17	18
24	16	126	45	30	43	172	252	109	39	20	16	22
25	14	74	35	80	50	272	180	85	30	22	14	27
26	14	58	40	60	70	201	145	76	27	25	13	60
27	13	78	43	100	68	145	124	67	29	23	13	26
28	13	231	43	60	60	132	113	67	26	20	15	22
29	12	94	38	40	54	127	101	65	25	19	13	19
30	14	69	35	33	---	104	98	60	24	18	13	18
31	15	---	34	28	---	91	---	57	---	18	12	---
TOTAL	419.8	1688	2971	1062	2501	4503	4992	2449	1098	932	535	487
MEAN	13.5	56.3	95.8	34.3	86.2	145	166	79.0	36.6	30.1	17.3	16.2
MAX	26	231	507	100	350	947	869	238	53	96	29	60
MIN	7.4	15	34	17	28	42	75	46	24	18	12	11
CFSM	.23	.96	1.63	.58	1.47	2.47	2.83	1.35	.62	.51	.30	.28
IN.	.27	1.07	1.88	.67	1.58	2.85	3.16	1.55	.70	.59	.34	.31

CAL YR 1983 TOTAL 18479.2 MEAN 50.6 MAX 664 MIN 7.4 CFSM .86 IN 11.71
WTR YR 1984 TOTAL 23637.8 MEAN 64.6 MAX 947 MIN 7.4 CFSM 1.10 IN 14.98

03274950 LITTLE WILLIAMS CREEK AT CONNERSVILLE, IN

LOCATION.--Lat 39°38'16", long 85°10'20", in SW¼NE¼ sec.27, T.14 N., R.12 E., Fayette County, Hydrologic Unit 05080003, on downstream left bank wingwall of bridge on State Highway 44, 1 mile west of Connersville, and 2.6 miles upstream from mouth.

DRAINAGE AREA.--9.16 mi².

PERIOD OF RECORD.--September 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 842.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Peak flows affected by ponding at abandoned railroad culvert 0.5 mile upstream.

AVERAGE DISCHARGE.--16 years, 10.2 ft³/s, 15.12 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,560 ft³/s June 22, 1974, gage height, 10.13 ft; minimum daily, 0.25 ft³/s Sept. 10, 11, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 22	1100	464	5.11
Aug. 4	1600	*729	*5.85

Minimum daily discharge, 0.30 ft³/s Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.32	1.4	11	4.2	4.0	6.9	15	15	6.4	1.8	9.7	.90
2	.30	1.5	10	4.3	10	6.8	14	14	6.1	1.7	5.8	.75
3	.34	1.8	9.8	4.3	60	6.5	15	16	5.4	1.8	1.9	2.2
4	.40	1.8	21	4.3	30	6.4	48	16	4.7	4.6	66	1.3
5	5.3	1.6	16	4.3	10	14	122	14	4.4	7.5	12	1.4
6	.82	1.4	16	4.3	7.0	15	32	17	4.0	3.3	4.0	1.2
7	.49	1.4	12	4.3	6.0	12	20	16	3.7	2.5	3.1	1.1
8	.44	1.4	11	4.3	5.5	11	17	16	3.7	2.0	5.6	.96
9	.49	1.3	9.7	4.3	5.0	7.9	15	14	3.8	1.8	2.8	1.0
10	.58	8.7	9.5	4.3	7.0	7.5	12	13	3.7	1.7	9.2	1.3
11	.60	14	81	4.2	25	7.2	12	12	3.5	1.6	9.8	1.1
12	.75	7.6	62	4.0	15	6.7	11	12	3.4	1.6	2.6	1.1
13	3.7	4.9	18	4.0	19	8.4	12	12	3.7	1.5	2.2	.85
14	1.5	3.8	18	4.0	20	9.6	11	11	6.0	1.4	1.9	1.8
15	.90	8.4	16	4.0	10	43	18	9.7	3.6	1.4	1.6	1.5
16	.77	10	14	3.9	9.0	98	28	9.2	3.3	1.4	1.4	1.1
17	.73	6.5	12	3.6	8.0	28	18	8.2	3.1	1.3	1.3	1.0
18	.90	5.0	9.8	3.4	7.1	28	8.7	7.8	3.4	1.3	1.4	1.0
19	1.0	4.1	7.8	3.0	7.2	23	7.7	7.3	3.6	1.2	1.3	.90
20	5.0	6.0	6.5	2.8	6.4	38	6.7	11	3.8	1.4	1.1	.81
21	7.2	5.5	7.1	2.5	6.2	27	15	26	3.9	1.6	1.1	.77
22	10	4.4	12	3.0	5.8	22	163	14	3.1	1.3	1.5	.70
23	9.2	32	6.4	4.0	5.6	20	46	43	3.6	1.1	1.4	1.7
24	4.1	18	5.0	8.1	7.3	18	29	18	3.4	1.1	1.2	2.4
25	3.0	11	4.5	12	11	20	24	15	2.8	1.2	1.0	2.2
26	2.3	8.0	4.8	9.0	10	20	23	12	2.6	9.2	.99	3.9
27	2.0	23	5.1	15	8.4	20	20	10	3.6	3.3	.97	1.5
28	1.7	39	5.0	7.0	7.8	27	18	12	2.4	1.7	1.7	1.3
29	1.6	15	4.9	5.0	6.9	23	16	9.9	2.1	1.4	1.3	1.2
30	1.5	12	4.3	4.5	---	18	17	8.4	2.0	1.3	1.1	1.1
31	1.5	---	4.0	4.0	---	16	---	7.2	---	1.2	1.0	---
TOTAL	69.43	260.5	434.2	153.9	340.2	614.9	814.1	426.7	112.8	67.2	157.96	40.04
MEAN	2.24	8.68	14.0	4.96	11.7	19.8	27.1	13.8	3.76	2.17	5.10	1.33
MAX	10	39	81	15	60	98	163	43	6.4	9.2	66	3.9
MIN	.30	1.3	4.0	2.5	4.0	6.4	6.7	7.2	2.0	1.1	.97	.70
CFSM	.25	.95	1.53	.54	1.28	2.16	2.96	1.51	.41	.24	.56	.15
IN.	.28	1.06	1.76	.62	1.38	2.50	3.31	1.73	.46	.27	.64	.16

CAL YR 1983 TOTAL 2996.21 MEAN 8.21 MAX 161 MIN .25 CFSM .90 IN 12.17
WTR YR 1984 TOTAL 3491.93 MEAN 9.54 MAX 163 MIN .30 CFSM 1.04 IN 14.18

03275000 WHITEWATER RIVER NEAR ALPINE, IN

LOCATION.--Lat 39°34'46", long 85°09'29", in SW¼SE¼ sec.14, T.13 N., R.12 E., Fayette County, Hydrologic Unit 05080003, on right bank at Nulltown, 400 ft upstream from Wilson Creek, 0.4 mile upstream from bridge on County Road 480 South, 2.0 miles northeast of Alpine, 5.1 miles upstream from Bear Creek, and at mile 54.8.

DRAINAGE AREA.--522 mi².

PERIOD OF RECORD.--October 1928 to current year. Prior to October 1936, published as West Fork Whitewater River near Alpine.

REVISED RECORDS.--WSP 1143: 1943-44(M), 1947 (M). WSP 1335: 1929-30, 1932(M), 1938, 1946-47(M), 1949-50. WSP 1505: 1942(P). WSP 1908: 1937(M), 1944, 1949(M), drainage area. WDR IN-79-1: 1975 (P).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 750.19 ft National Geodetic Vertical Datum of 1929. Prior to Nov. 9, 1928, nonrecording gage and Nov. 10, 1928 to Sept. 30, 1982 at site 0.5 mile downstream at same datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--56 years, 552 ft³/s, 14.17 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,100 ft³/s Jan. 14, 1937, gage height, 16.61 ft; minimum daily, 6.0 ft³/s Sept. 8, 9, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 6,500 ft³/s and maximum (*):

Date		Time	Discharge (ft³/s)	Gage height (ft)
Mar.	17	0100	7320	14.54
Apr.	23	0700	*9320	a*15.46

a--from high water mark.

Minimum daily discharge, 66 ft³/s Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	122	607	313	257	424	790	895	503	207	159	103
2	66	122	515	306	444	433	702	783	478	204	174	100
3	68	124	462	304	2280	393	690	809	444	207	165	132
4	72	127	707	304	1340	369	1020	835	421	324	308	124
5	102	122	1050	302	695	475	3820	733	403	618	320	113
6	92	120	1170	310	485	651	3130	802	385	528	186	112
7	83	122	1180	295	365	622	1770	758	367	389	171	107
8	79	122	842	278	328	573	1250	727	345	304	198	100
9	74	120	685	272	323	477	1010	679	333	261	155	97
10	76	215	621	269	534	458	855	623	316	242	171	107
11	78	757	1330	242	1820	444	745	575	304	226	227	110
12	81	528	4090	233	1090	386	684	554	296	220	169	101
13	115	376	2200	236	1030	431	714	508	292	210	152	92
14	115	310	1470	223	958	451	696	468	320	220	143	108
15	100	338	1330	216	745	825	922	430	280	210	137	125
16	90	584	994	215	637	5470	1690	403	268	204	133	106
17	86	544	798	214	593	4260	2530	380	265	198	129	100
18	86	423	670	205	553	2010	1960	367	265	195	135	99
19	88	364	568	167	551	1470	1480	350	245	186	134	96
20	138	358	537	150	525	1720	1190	354	235	183	131	94
21	232	402	523	150	471	2590	1210	1410	235	195	125	91
22	243	404	667	160	429	1780	4130	1130	223	183	128	88
23	294	746	504	182	394	1450	6290	2270	229	174	132	100
24	244	1480	369	381	383	1590	3690	1500	449	168	126	178
25	199	962	319	686	478	1510	2360	1030	398	168	118	146
26	171	687	359	526	632	1970	1740	835	288	261	115	211
27	153	628	371	885	638	1430	1400	690	265	223	114	228
28	145	1850	379	457	560	1310	1210	667	242	183	127	178
29	130	1440	348	347	470	1450	1070	645	226	168	121	153
30	124	858	310	298	---	1120	1030	586	216	159	114	140
31	122	---	308	255	---	908	---	544	---	153	107	---
TOTAL	3814	15355	26283	9381	20008	39450	51778	23340	9536	7371	4824	3639
MEAN	123	512	848	303	690	1273	1726	753	318	238	156	121
MAX	294	1850	4090	885	2280	5470	6290	2270	503	618	320	228
MIN	66	120	308	150	257	369	684	350	216	153	107	88
CFSM	.24	.98	1.63	.58	1.32	2.44	3.31	1.44	.61	.46	.30	.23
IN.	.27	1.09	1.87	.67	1.43	2.81	3.69	1.66	.68	.53	.34	.26

CAL YR 1983 TOTAL 164991 MEAN 452 MAX 5850 MIN 61 CFSM .87 IN 11.76
WTR YR 1984 TOTAL 214779 MEAN 587 MAX 6290 MIN 66 CFSM 1.13 IN 15.31

03275600 EAST FORK WHITEWATER RIVER AT ABINGTON, IN

LOCATION.--Lat 39°43'57", long 84°57'35", in NE¼SW¼ sec.2, T.12 N., R.2 W., Wayne County, Hydrologic Unit 05080003, at downstream side of center pier of bridge on county road at Abington, 3 miles downstream from Elkhorn Creek, 8 miles southwest of Richmond, and at mile 26.7.

DRAINAGE AREA.--200 mi^2.

PERIOD OF RECORD.--October 1965 to current year.

REVISED RECORDS.--WSP 2108: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 791.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--19 years, 229 ft^3/s, 15.55 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,400 ft^3/s July 20, 1969, gage height, 16.18 ft; minimum daily, 14 ft^3/s Sept. 11, 13, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 16	1000	*3570	*9.96

Minimum daily discharge, 19 ft^3/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	42	199	93	73	137	296	243	171	68	44	32
2	20	51	168	95	186	137	259	221	158	70	48	31
3	19	79	155	92	1060	127	279	248	143	66	49	113
4	26	73	362	92	376	121	382	254	134	241	336	60
5	96	60	446	93	186	209	1420	227	124	341	114	48
6	37	53	513	94	125	312	1210	260	121	242	68	41
7	29	50	401	90	95	256	635	238	112	149	56	38
8	26	47	271	85	88	225	456	248	105	109	77	35
9	24	45	213	83	85	175	369	230	98	92	65	33
10	24	56	196	85	122	161	306	207	93	84	107	41
11	25	197	644	73	353	155	260	188	88	75	128	36
12	26	125	1340	72	255	134	236	190	85	70	68	33
13	142	95	624	72	311	165	287	169	82	65	55	30
14	59	82	458	71	373	187	269	164	86	61	49	95
15	37	127	388	69	258	462	490	148	75	58	44	64
16	32	204	285	69	213	2610	1020	138	73	58	41	42
17	29	144	221	68	192	974	1410	133	71	55	40	37
18	44	113	190	65	176	630	819	129	70	52	107	36
19	40	102	159	55	181	477	604	125	70	50	56	34
20	137	142	153	50	165	785	485	169	84	51	44	32
21	150	177	151	50	145	1050	400	831	76	60	40	31
22	182	134	259	52	130	720	1350	480	67	50	51	30
23	216	495	160	61	122	571	1630	1620	142	48	50	54
24	161	518	119	172	121	598	1290	648	490	46	41	102
25	106	312	100	266	178	575	707	414	193	60	37	114
26	83	208	110	201	194	729	528	312	122	76	35	229
27	67	201	124	301	195	534	426	236	103	74	34	87
28	57	917	125	122	182	508	356	282	90	55	55	67
29	50	511	110	97	151	688	303	263	80	49	43	58
30	45	277	91	85	---	457	295	214	73	46	37	51
31	44	---	90	73	---	352	---	190	---	45	34	---
TOTAL	2053	5637	8825	3046	6291	15221	18777	9419	3479	2666	2053	1734
MEAN	66.2	188	285	98.3	217	491	626	304	116	86.0	66.2	57.8
MAX	216	917	1340	301	1060	2610	1630	1620	490	341	336	229
MIN	19	42	90	50	73	121	236	125	67	45	34	30
CFSM	.33	.94	1.43	.49	1.09	2.46	3.13	1.52	.58	.43	.33	.29
IN.	.38	1.05	1.64	.57	1.17	2.83	3.49	1.75	.65	.50	.38	.32

CAL YR 1983 TOTAL 57720 MEAN 158 MAX 2320 MIN 14 CFSM .79 IN 10.74
WTR YR 1984 TOTAL 79201 MEAN 216 MAX 2610 MIN 19 CFSM 1.08 IN 14.73

03276000 EAST FORK WHITEWATER RIVER AT BROOKVILLE, IN

LOCATION.--Lat 39°26'02", long 85°00'12", in NE¼NE¼ sec.20, T.9 N., R.2 W., Franklin County, Hydrologic Unit 05080003, on right bank 100 ft upstream from bridge on State Highway 101, at Brookville, 0.4 mile downstream from Brookville Lake, and 1.8 miles upstream from mouth.

DRAINAGE AREA.--380 mi².

PERIOD OF RECORD.--March 1954 to current year.

REVISED RECORDS.--WSP 1555: 1954(M), 1955(P). WSP 1908: 1955, drainage area.

GAGE.--None. Datum of gage was 621.76 ft National Geodetic Vertical Datum of 1929. Prior to May 22, 1954, nonrecording gage at site 100 ft downstream at datum 2.00 ft higher. May 22, 1954 to Aug. 20, 1965, water-stage recorder at site 165 ft downstream at datum 2.00 ft higher. Aug. 21, 1965 to Sept. 30, 1981, water-stage recorder at site described in "LOCATION" paragraph.

REMARKS.--Flow regulated by Brookville Lake since January 1974 (see sta 03275990).

COOPERATION.--Records of daily discharge furnished by Corps of Engineers beginning Oct. 1, 1981.

AVERAGE DISCHARGE.--30 years, 396 ft³/s, 14.15 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,100 ft³/s Jan. 21, 1959; maximum gage height, 17.35 ft May 24, 1968; no flow, July 27, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 3,940 ft³/s Apr. 25; minimum daily, 35 ft³/s July 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	228	683	480	191	370	439	747	492	297	82	380	42
2	228	613	330	191	370	370	747	492	200	57	380	42
3	228	543	247	191	772	370	553	492	200	35	193	42
4	228	646	247	191	992	370	488	818	200	74	97	42
5	228	681	744	191	992	439	490	649	200	278	97	42
6	228	680	991	191	758	651	1470	492	200	453	127	42
7	228	680	991	191	370	736	1720	650	200	491	144	42
8	228	679	991	191	370	736	1050	942	100	491	215	42
9	228	678	667	303	251	598	753	716	150	309	258	42
10	228	678	370	370	191	370	753	491	200	136	258	42
11	490	678	371	370	266	370	506	491	200	63	344	42
12	490	678	372	370	371	370	382	491	200	42	336	42
13	490	677	1350	255	772	439	382	491	239	42	306	42
14	880	677	2010	191	991	480	383	491	322	42	158	42
15	620	676	2010	191	799	238	383	421	354	42	60	42
16	490	676	2010	191	480	94	384	386	354	42	42	42
17	490	676	2010	191	480	95	1120	386	354	42	42	42
18	490	675	2000	191	480	95	1880	386	200	42	42	42
19	490	675	1240	191	432	341	1560	386	200	42	42	42
20	490	674	491	191	370	1170	1110	386	131	42	42	42
21	687	674	191	191	370	2190	1030	457	97	42	42	42
22	687	674	191	95	370	2530	821	493	97	42	42	42
23	687	674	311	55	370	1530	1470	495	97	42	42	42
24	687	675	370	55	370	1010	3330	1990	97	42	42	200
25	687	1290	370	157	370	1210	3940	2620	290	42	42	386
26	687	1730	370	311	370	1500	2300	1020	386	42	42	386
27	686	1720	370	371	385	1190	603	491	386	42	42	386
28	686	1720	370	371	454	1250	491	491	386	42	42	386
29	685	1720	370	371	481	1090	491	491	386	42	42	160
30	684	944	370	772	---	747	492	491	215	258	42	57
31	684	---	296	732	---	747	---	490	---	380	42	---
TOTAL	15247	25144	23501	8014	14417	23765	31829	20078	6938	3863	4075	2927
MEAN	492	838	758	259	497	767	1061	648	231	125	131	97.6
MAX	880	1730	2010	772	992	2530	3940	2620	386	491	386	385
MIN	228	543	191	55	191	94	382	386	97	35	42	42
CPSM	1.30	2.21	2.00	.68	1.31	2.02	2.79	1.71	.61	.33	.35	.26
IN.	1.49	2.46	2.30	.78	1.41	2.33	3.12	1.97	.68	.38	.40	.29

CAL YR 1983 TOTAL 153121 MEAN 420 MAX 4360 MIN 41 CPSM 1.11 IN 14.99
WTR YR 1984 TOTAL 179798 MEAN 491 MAX 3940 MIN 35 CPSM 1.29 IN 17.60

03276500 WHITEWATER RIVER AT BROOKVILLE, IN
(National stream-quality accounting network station)

LOCATION.--Lat 39°24'24", long 85°00'46", in NE¼NW¼ sec.32, T.9 N., R.2 W., Franklin County, Hydrologic Unit *05080003, on right bank at downstream side of highway bridge,* 0.3 mile downstream from East Fork Whitewater River, 1.1 miles south of Brookville, and at mile 29.3.

DRAINAGE AREA.--1,224 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1915 to September 1917, October 1917 to May 1920 (gage heights only), and July 1923 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1915-17, 1929, 1930(M), 1933(M), 1934, 1935(m), 1936. WSP 1505: 1916(M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 595.71 ft National Geodetic Vertical Datum of 1929. Prior to July 1923, nonrecording gage at same site at datum 1.5 ft higher. July 1923 to Sept. 27, 1928, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated by Brookville Lake since January 1974.

AVERAGE DISCHARGE.--63 years (water years 1916-17, 1924 to current year), 1,273 ft³/s, 14.12 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximun discharge, 81,800 ft³/s Jan. 21, 1959, gage height, 27.78 ft, from rating curve extended above 45,000 ft³/s on basis of contracted-opening measurement of peak flow; minimum daily, 60 ft³/s July 27, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 25, 1913, reached a stage of 39.0 ft, at present datum, from floodmarks (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,800 ft³/s Apr. 5, gage height, 10.66 ft; minimum daily, 157 ft³/s Sept. 21, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	240	740	1460	569	569	1060	1860	1680	940	361	368	177
2	229	740	1120	587	649	872	1670	1550	758	320	433	171
3	224	740	950	578	2580	852	1530	1970	703	314	354	177
4	229	730	1580	552	2790	824	2280	2520	640	433	301	208
5	245	730	1910	552	1820	1580	11000	1940	614	1300	514	192
6	263	730	2200	596	1340	2190	5450	1930	596	1130	375	187
7	250	740	2260	605	767	1860	3870	1940	569	1060	347	177
8	240	740	1990	545	685	1770	2700	2150	537	901	418	171
9	234	721	1520	560	631	1390	2140	1890	522	623	389	166
10	234	824	1110	587	596	1020	1950	1510	499	440	354	166
11	284	2050	1970	587	1790	993	1580	1400	477	375	411	166
12	552	1390	6770	560	1640	901	1320	1360	469	340	477	166
13	767	1110	3920	507	1930	1200	1430	1320	492	320	440	162
14	740	1000	3010	462	2140	1670	1370	1290	537	314	333	171
15	560	1090	2890	455	1750	2100	1510	1080	578	307	245	187
16	522	1490	2470	447	1340	7820	2190	940	560	301	229	187
17	587	1400	2160	440	1270	5480	3850	901	529	288	224	177
18	640	1180	2000	433	1210	2770	3920	872	462	275	219	166
19	514	1080	1780	404	1130	2280	3230	843	455	269	213	162
20	685	1110	1220	361	961	3540	2610	814	418	269	208	162
21	1120	1200	881	327	891	5120	3230	1620	375	269	203	157
22	1040	1120	1120	314	833	4570	7690	1820	368	263	203	157
23	1290	2790	961	327	786	3380	9530	3300	368	250	208	182
24	971	2680	767	484	758	2770	7690	3570	425	245	203	320
25	891	2390	537	1290	920	2890	6210	3430	623	256	198	545
26	852	2310	614	824	1140	3510	4070	2010	605	389	192	560
27	725	2160	694	1330	1270	2860	2410	1410	569	640	192	507
28	767	4240	740	930	1330	2650	2040	1430	545	361	203	455
29	758	3370	721	730	1200	3350	1840	1460	522	301	219	320
30	749	2090	640	971	---	2510	1840	1290	440	368	198	245
31	740	---	605	940	---	2020	---	1190	---	433	187	---
TOTAL	18212	44685	52570	18854	36716	77802	104010	52430	16195	13715	9058	6946
MEAN	587	1490	1696	608	1266	2510	3467	1691	540	442	292	232
MAX	1290	4240	6770	1330	2790	7820	11000	3570	940	1300	514	560
MIN	224	721	537	314	569	824	1320	814	368	245	187	157
CFSM	.48	1.22	1.39	.50	1.03	2.05	2.83	1.38	.44	.36	.24	.19
IN.	.55	1.36	1.60	.57	1.12	2.36	3.16	1.59	.49	.42	.28	.21

CAL YR 1983 TOTAL 400209 MEAN 1096 MAX 18100 MIN 115 CFSM .90 IN 12.16
WTR YR 1984 TOTAL 451193 MEAN 1233 MAX 11000 MIN 157 CFSM 1.01 IN 13.71

03276500 WHITEWATER RIVER AT BROOKVILLE, IN--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: October 1973 to September 1981.
CHEMICAL ANALYSES: October 1974 to current year.
WATER TEMPERATURE: October 1974 to September 1981.
SEDIMENT DISCHARGE: October 1974 to current year (Partial-record station).

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 630 micromhos Feb. 9, 19, 1980, July 27, 1981; minimum, 95 micromhos Nov. 25, 1978.
WATER TEMPERATURE: Maximum, 28.0°C July 31, Aug. 21, 1975; minimum, 0.0°C on many days during 1976-77 winter periods, Feb. 8, 1979, Jan. 9-11, Feb 4, 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	CALCIUM DISSOLVED (MG/L AS CA)
NOV 28...	1600	4250	383	8.1	6.0	9.5	55	11.6	758	5600	54000	52
FEB 06...	1300	1510	526	8.6	-9.0	2.0	4.3	13.9	770	4200	K1400	67
APR 30...	1300	1960	546	8.0	--	13.0	11	11.7	863	2200	220	69
JUL 23...	1330	240	611	7.9	34.0	25.0	1.2	10.9	750	K7400	220	70

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)
NOV 28...	19	8.6	3.2	154	39	18	.20	4.9	283	2.8	.010	1.7
FEB 06...	26	13	3.1	210	52	27	.30	5.5	382	4.0	.190	1.1
APR 30...	24	7.9	2.0	218	41	18	.20	5.1	385	3.7	<.010	1.0
JUL 23...	28	10	2.2	229	42	22	.20	3.4	396	1.2	<.040	.70

DATE	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS TOTAL (MG/L AS PO4)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)
NOV 28...	.260	.80	.090	.020	60	1	56	.6	2	<1	3	5
FEB 06...	.090	.28	.070	<.010	20	1	74	<.5	<1	<1	<3	4
APR 30...	.040	.12	<.010	<.010	<10	1	71	<1.0	<1	<1	<3	2
JUL 23...	.080	--	.040	.020	20	<1	85	<.0	<1	5	<3	2

03276500 WHITEWATER RIVER AT BROOKVILLE, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGANESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV												
28...	81	2	<4	8	.2	<10	1	<1	<1	190	<6	9
FEB												
06...	22	1	<4	14	.5	<10	6	<1	<1	310	<6	8
APR												
30...	29	3	5	8	.4	<10	3	<1	<1	270	<6	7
JUL												
23...	7	1	6	7	.6	<10	2	<1	1	300	<6	11

DATE	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV			
28...	31	356	89
FEB			
06...	14	57	90
APR			
30...	64	339	83
JUL			
23...	21	14	93

03276700 SOUTH HOGAN CREEK NEAR DILLSBORO, IN
(Hydrologic bench-mark station)

LOCATION.--Lat 39°01'47", long 85°02'17", in SW¼NW¼ sec.7, T.4 N., R.2 W., Dearborn County, Hydrologic Unit 05090203, on left downstream abutment of bridge on county road at Dillsboro Station, 1.2 miles north-east of Dillsboro, and 1.5 miles downstream from Whitaker Creek.

DRAINAGE AREA.--38.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1961 to current year. Occasional low-flow measurements, water year 1960.

REVISED RECORDS.--WDR IN-72-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 571.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those below 1 ft³/s, which are poor.

AVERAGE DISCHARGE.--23 years, 42.6 ft³/s, 15.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft³/s Apr. 29, 1970, maximum gage height, 12.7 ft, from floodmarks Apr. 29, 1970 and from crest-stage gage June 10, 1981; no flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959, reached a stage of 14.00 ft, discharge, 16,300 ft³/s, on basis of contracted-opening measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 23	unknown	*2200	*5.75

Minimum daily discharge, no flow Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	6.2	29	6.8	12	38	37	21	11	.11	.27	.33
2	.02	6.0	24	11	29	34	31	19	8.0	.10	.73	.23
3	.00	7.8	31	21	195	49	41	183	6.4	.09	1.6	.55
4	1.6	8.1	262	15	65	36	251	285	5.2	20	44	7.3
5	1.5	7.0	81	14	30	383	687	99	4.4	91	11	5.2
6	.69	6.4	59	26	18	181	135	73	3.5	39	4.0	2.9
7	.35	5.8	46	24	10	87	64	62	3.4	22	2.4	2.1
8	.22	5.4	33	14	9.0	76	46	92	2.7	5.9	135	1.3
9	.19	5.1	27	11	8.0	55	40	59	2.3	3.4	26	.88
10	.14	5.5	23	13	19	47	36	40	1.9	2.2	8.3	.57
11	.11	23	377	10	114	37	29	31	1.6	1.4	4.7	.29
12	.50	21	345	9.0	68	30	26	27	1.3	1.0	3.0	.20
13	9.8	14	87	7.4	139	153	33	24	1.1	.61	2.2	.19
14	10	11	65	7.0	123	168	32	24	1.0	.32	1.5	.16
15	3.5	33	71	6.4	59	154	30	18	.84	.17	.99	.17
16	1.8	60	42	6.0	44	615	56	14	.97	.13	.29	.16
17	.80	42	30	5.5	38	110	131	12	.64	.10	.15	.13
18	4.1	28	22	5.0	34	73	77	11	2.2	.09	.10	.11
19	9.2	22	18	4.7	34	51	53	10	17	.08	.10	.10
20	275	52	15	4.4	29	500	40	9.0	4.7	.07	.09	.09
21	343	66	17	4.0	25	182	431	8.9	2.1	.06	.08	.09
22	490	32	77	4.0	22	155	913	7.4	1.8	.05	.08	.08
23	198	696	50	6.0	20	112	241	31	2.2	.03	.09	.55
24	50	164	25	140	25	63	172	15	24	.01	.10	105
25	31	46	15	100	86	93	79	9.1	3.1	.02	.09	29
26	21	31	11	71	68	83	52	178	1.6	.64	.09	57
27	16	47	14	78	41	58	40	39	.80	20	.09	11
28	12	429	18	28	39	290	33	37	.45	4.7	.10	4.7
29	10	65	23	15	36	171	28	32	.23	2.5	.67	3.0
30	8.1	42	14	10	---	68	26	20	.14	1.4	1.3	2.3
31	7.0	---	7.4	8.0	---	46	---	15	---	.74	.60	---
TOTAL	1505.66	1987.3	1958.4	685.2	1439.0	4198	3890	1505.4	116.57	217.92	249.71	235.68
MEAN	48.6	66.2	63.2	22.1	49.6	135	130	48.6	3.89	7.03	8.06	7.86
MAX	490	696	377	140	195	615	913	285	24	91	135	105
MIN	.00	5.1	7.4	4.0	8.0	30	26	7.4	.14	.01	.08	.08
CFSM	1.28	1.74	1.66	.58	1.30	3.54	3.41	1.28	.10	.19	.21	.21
IN.	1.47	1.94	1.91	.67	1.40	4.10	3.80	1.47	.11	.21	.24	.23

CAL YR 1983 TOTAL 19486.43 MEAN 53.4 MAX 1620 MIN .00 CFSM 1.40 IN 19.03
WTR YR 1984 TOTAL 17988.84 MEAN 49.1 MAX 913 MIN .00 CFSM 1.29 IN 17.56

BEST COPY AVAILABLE

03276700 SOUTH HOGAN CREEK NEAR DILLSBORO, IN--Continued
(Hydrologic bench-mark station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL ANALYSES: October 1968 to current year.
SEDIMENT DISCHARGE: August 1969 to current (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	CALCIUM DISSOLVED (MG/L AS CA)
NOV												
29...	1100	73	331	8.5	3.5	5.5	16	12.1	765	2300	K4400	55
FEB												
07...	1015	8.3	425	9.3	-15.0	.0	2.6	13.7	779	K10	960	67
MAY												
01...	1030	22	408	8.1	18.0	13.5	2.5	11.2	753	2600	K4	66
JUL												
24...	0900	.01	428	7.4	25.5	24.0	7.2	4.6	754	240	3100	62

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)
NOV												
29...	8.2	9.4	3.4	126	38	14	.20	7.2	235	2.0	.030	1.5
FEB												
07...	12	13	3.3	166	60	22	<.10	4.6	323	1.4	.020	.70
MAY												
01...	12	8.6	1.9	163	52	11	.20	2.0	229	.74	<.010	1.5
JUL												
24...	12	12	4.1	158	47	17	.20	4.0	308	<.10	.020	.70

DATE	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS TOTAL (MG/L AS PO4)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
NOV												
29...	.130	.40	.15	.050	--	--	--	--	--	--	--	--
FEB												
07...	.060	.18	--	<.010	--	--	--	--	--	--	--	--
MAY												
01...	.030	.09	--	<.010	--	--	--	--	--	--	--	--
JUL												
24...	.070	--	--	<.010	20	1	1.5	<1	<1	<3	<1	6

03276700 SOUTH HOGAN CREEK NEAR DILLSBORO, IN--Continued
(Hydrologic bench-mark station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)
NOV												
29...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
07...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
01...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
24...	<1	<4	69	.5	<10	1	<1	230	<6	6	<6.5	<.6

DATE	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV									
29...	--	--	--	--	--	--	210	41	90
FEB									
07...	--	--	--	--	--	--	19	.43	95
MAY									
01...	--	--	--	--	--	--	22	1.3	94
JUL									
24...	4.6	1.1	4.0	.9	.08	.9	57	.00	96

03291780 INDIAN-KENTUCK CREEK NEAR CANAAN, IN

LOCATION.--Lat 38°52'41", long 85°15'26", in SW¼NW¼ sec.13, T.5 N., R.11 E., Jefferson County, Hydrologic Unit 05140101, on downstream end of left pier of bridge on State Highway 62, 1,500 ft upstream from Wilson Fork, 2.0 miles northeast of Canaan, and at mile 16.7.

DRAINAGE AREA.--27.5 mi^2.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 590 ft, from topographic map.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--15 years, 34.9 ft^3/s, 17.23 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,240 ft^3/s June 10, 1981, maximum gage height, 11.27 ft Aug. 1, 1979; no flow for many days in 1970, 1972, 1975, 1983 and 1984.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	2145	1860	6.75	Mar. 16	0315	1590	6.43
Oct. 21	0615	1760	6.63	Apr. 22	0430	1870	6.76
Oct. 22	1630	2050	6.97	June 23	1500	1530	6.35
Nov. 23	1215	*2330	*7.27				

Minimum daily discharge, no flow on many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	7.4	29	13	12	23	38	19	15	.55	.51	.42
2	.00	9.4	25	15	20	24	32	17	12	.49	.52	.33
3	.00	15	28	19	112	40	43	121	8.9	.39	.54	.28
4	.03	11	169	15	55	43	140	236	6.4	109	29	.39
5	.16	8.4	68	20	36	295	363	92	5.1	237	8.5	.56
6	.06	7.4	65	25	24	125	101	70	3.5	54	2.8	.43
7	.03	6.9	35	15	19	68	59	57	2.7	26	1.7	.29
8	.00	6.0	28	12	15	52	42	83	2.0	15	1.3	.21
9	.00	5.5	24	11	11	36	37	54	1.7	9.4	.72	.14
10	.00	11	21	17	20	30	32	39	1.4	6.9	.59	.13
11	.00	27	285	10	52	28	26	33	1.3	5.5	.54	.09
12	.06	20	261	7.0	45	22	23	26	1.0	4.7	.48	.07
13	23	14	93	6.7	119	100	29	22	.70	2.8	.43	.00
14	5.5	12	68	6.3	93	89	25	20	.64	1.7	.37	.03
15	1.8	44	55	6.0	52	70	22	16	.59	1.4	.31	.00
16	1.3	51	35	5.6	40	400	56	13	.54	1.4	.25	.00
17	.68	41	28	5.3	35	94	91	12	.45	.65	.22	.00
18	18	29	22	5.0	30	65	62	12	.41	.55	.19	.00
19	9.4	23	17	4.7	28	51	44	11	1.6	.45	.15	.00
20	652	78	13	4.4	24	255	35	11	.92	.39	.08	.00
21	731	57	17	4.0	19	132	328	10	.61	.32	.02	.00
22	715	33	80	4.0	17	96	730	9.5	18	.29	.08	.00
23	200	525	47	7.0	15	62	228	16	174	.26	.13	.04
24	85	141	25	30	14	48	149	12	43	.19	.06	20
25	48	62	15	100	32	60	84	8.7	7.4	.16	.01	7.8
26	32	38	11	60	36	58	60	199	3.1	19	.00	11
27	22	167	14	40	27	50	45	58	1.8	11	.00	2.8
28	16	292	17	25	28	217	36	57	1.5	2.4	9.0	1.3
29	12	75	22	15	22	130	29	47	1.1	1.5	6.3	.63
30	9.4	43	13	12	---	63	27	30	.65	.90	1.3	.55
31	8.4	---	12	10	---	45	---	22	---	.60	.57	---
TOTAL	2590.82	1860.0	1642	530.0	1052	2871	3016	1433.2	318.01	514.89	66.67	47.49
MEAN	83.6	62.0	53.0	17.1	36.3	92.6	101	46.2	10.6	16.6	2.15	1.58
MAX	731	525	285	100	119	400	730	236	174	237	29	20
MIN	.00	5.5	11	4.0	11	22	22	8.7	.41	.16	.00	.00
CFSM	3.04	2.26	1.93	.62	1.32	3.37	3.67	1.68	.39	.60	.08	.06
IN.	3.50	2.52	2.22	.72	1.42	3.88	4.08	1.94	.43	.70	.09	.06

CAL YR 1983 TOTAL 18139.79 MEAN 49.7 MAX 1120 MIN .00 CFSM 1.81 IN 24.54
WTR YR 1984 TOTAL 15942.08 MEAN 43.6 MAX 731 MIN .00 CFSM 1.59 IN 21.56

03294000 SILVER CREEK NEAR SELLERSBURG, IN

LOCATION.--Lat 38°22'15", long 85°43'35", in SW¼SW¼ lot 68, Clark Military Grant, Clark County, Hydrologic Unit 05150101, on downstream side of Straws Mill bridge on Watson Road, 0.3 mile downstream from Pleasant Run, 2.4 miles southeast of Sellersburg, and 12.2 miles upstream from mouth.

DRAINAGE AREA.--189 mi².

PERIOD OF RECORD.--October 1954 to current year.

REVISED RECORDS.--WSP 1705: 1955-58. WDR IN-72-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 429.78 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 6, 1976, and Feb. 15 to Sept. 20, 1984 nonrecording gage and crest-stage gage at same site and datum.

REMARKS.--Records fair. Some regulation by Deam Lake.

AVERAGE DISCHARGE.--30 years, 225 ft³/s, 16.17 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,600 ft³/s Jan. 22, 1959, gage height, 30.89 ft, from floodmarks, from rating curve extended above 6,300 ft³/s on basis of contracted-opening measurements of peak flow, at site 5.2 miles upstream, drainage area, 165 mi², adjusted to gage site; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 28	1000	3110	16.43
Apr. 22	unknown	*6940	*22.96

Minimum daily discharge, 1.0 ft³/s Oct, 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	24	304	74	84	168	349	163	82	4.4	7.1	2.9
2	1.0	22	242	94	107	253	274	151	51	4.4	5.5	1.8
3	1.0	28	215	145	307	496	231	330	41	4.4	14	3.0
4	4.8	28	730	122	385	391	336	1710	37	27	19	6.8
5	11	25	465	188	247	840	1320	943	36	134	10	7.7
6	9.2	35	288	194	185	884	674	714	31	76	7.4	7.1
7	7.0	23	240	183	127	387	415	1460	27	80	6.0	5.8
8	6.1	19	200	134	111	358	312	1920	24	40	14	3.7
9	6.3	17	170	121	108	264	276	758	19	22	9.4	3.2
10	7.6	18	145	152	108	213	274	476	18	16	7.7	2.6
11	8.7	61	621	132	227	190	213	338	14	15	8.0	2.3
12	8.6	118	1430	107	301	173	198	260	13	13	8.0	2.1
13	58	77	791	101	492	332	329	222	13	9.4	5.3	1.8
14	42	56	519	88	478	500	225	306	13	7.4	4.0	1.6
15	24	61	435	79	321	325	200	176	15	7.1	3.5	3.3
16	17	183	323	76	240	2050	155	150	13	8.0	3.5	4.8
17	12	154	240	73	215	716	226	131	12	7.7	4.2	3.7
18	8.0	114	198	61	190	478	262	108	12	8.4	61	2.6
19	5.2	92	159	50	190	636	211	97	13	7.4	32	1.8
20	55	148	138	45	165	1730	180	74	20	7.1	13	1.7
21	517	331	140	35	147	1670	854	66	67	4.4	10	1.5
22	621	177	431	30	129	775	5170	213	32	3.5	11	1.5
23	1220	1020	263	30	119	507	5020	1170	14	3.5	29	11
24	275	1720	192	294	129	423	1090	310	13	3.5	14	25
25	165	472	142	535	176	616	562	181	11	3.5	7.4	18
26	119	312	111	245	176	566	413	198	7.4	4.0	6.3	12
27	83	288	99	189	157	500	369	251	6.0	52	5.8	11
28	54	2570	212	156	171	775	284	173	5.8	22	6.8	8.7
29	43	656	227	141	163	1940	204	147	5.8	23	6.6	7.1
30	32	395	123	110	---	614	181	120	4.4	10	4.8	8.4
31	27	---	96	81	---	457	---	96	---	8.0	3.0	---
TOTAL	3449.5	9244	9889	4055	5955	20227	20807	13412	670.4	636.1	347.3	174.5
MEAN	111	308	319	131	205	652	694	433	22.3	20.5	11.2	5.82
MAX	1220	2570	1430	535	492	2050	5170	1920	82	134	61	25
MIN	1.0	17	96	30	84	168	155	66	4.4	3.5	3.0	1.5
CFSM	.59	1.63	1.69	.69	1.09	3.45	3.67	2.29	.12	.11	.06	.03
IN.	.68	1.82	1.95	.80	1.17	3.98	4.10	2.64	.13	.13	.07	.03

CAL YR 1983 TOTAL 103241.2 MEAN 283 MAX 9140 MIN 1.0 CFSM 1.50 IN 20.32
WTR YR 1984 TOTAL 88876.8 MEAN 243 MAX 5170 MIN 1.0 CFSM 1.29 IN 17.49

03302220 BUCK CREEK NEAR NEW MIDDLETOWN, IN

LOCATION.--Lat 38°07'13", long 86°05'16", in SE¼NE¼ sec.32, T.4 S., R.4 E., Harrison County, Hydrologic Unit 05140104, at downstream end of pier of bridge on State Highway 337, 0.6 mile downstream from South Fork Buck Creek, 3.6 miles southwest of New Middletown, and 14.4 miles upstream from mouth.

DRAINAGE AREA.--65.2 mi^2, of which 28.1 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1969 to current year.

REVISED RECORDS.--WDR IN-72-1: 1971(P).

GAGE.--Water-stage recorder. Datum of gage is 501.63 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good except those for winter periods, which are fair, those for October and September, which are poor.

AVERAGE DISCHARGE.--15 years, 82.5 ft^3/s, 17.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,700 ft^3/s Apr. 2, 1970, gage height, 14.40 ft; minimum daily, 0.90 ft^3/s Sept. 13, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 22	unknown	2330	a7.28	July 4	0800	2250	7.16
May 7	1900	*2410	a*7.39				

Minimum daily discharge, 1.1 ft^3/s Oct. 3.

a From peak stage indicator

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	2.9	82	31	32	41	108	61	24	6.0	8.0	4.5
2	1.2	2.9	69	32	29	55	96	57	22	5.6	24	5.6
3	1.1	3.2	70	42	74	107	113	87	20	5.3	30	8.3
4	5.0	3.4	174	38	60	129	292	309	17	633	12	9.8
5	25	3.0	122	50	45	315	353	170	16	481	13	7.2
6	16	3.3	99	44	38	200	206	151	15	194	9.0	6.4
7	10	4.1	73	40	34	124	147	802	13	125	8.0	6.1
8	7.0	4.3	63	34	30	97	124	707	12	57	7.9	5.9
9	6.0	4.3	55	33	27	79	108	346	11	41	6.8	6.2
10	5.4	7.5	48	39	26	70	95	229	11	33	12	7.4
11	5.0	15	334	37	30	64	86	177	24	30	13	7.3
12	6.0	17	372	37	36	58	116	141	42	30	11	6.8
13	40	13	208	36	63	109	99	170	15	23	7.3	6.5
14	20	12	157	32	62	109	79	151	12	20	5.8	6.3
15	13	24	122	31	49	96	76	121	11	21	5.2	7.5
16	10	33	90	28	44	418	77	101	11	22	5.0	8.0
17	9.0	28	71	27	41	224	82	67	11	17	6.6	7.4
18	9.6	23	60	21	36	156	79	60	9.4	15	19	7.7
19	9.0	18	50	16	36	197	74	54	8.9	12	7.9	7.8
20	12	35	44	13	32	645	68	49	19	11	5.9	8.3
21	47	43	60	11	30	410	250	44	9.1	11	5.2	8.7
22	152	20	150	10	28	291	1400	40	8.4	9.9	13	9.3
23	67	479	90	11	27	198	700	456	8.2	8.6	16	20
24	21	261	68	25	28	167	260	111	7.7	8.0	7.5	24
25	11	133	54	70	31	157	195	70	6.5	8.8	5.4	32
26	6.0	87	45	52	30	149	156	85	6.0	11	4.7	13
27	5.1	274	39	46	34	147	131	58	6.2	28	4.4	9.3
28	4.2	441	50	39	37	232	113	46	6.1	14	5.5	7.9
29	3.7	189	61	37	36	237	102	37	6.1	17	5.9	6.8
30	3.4	116	51	34	---	156	93	31	6.6	9.7	5.7	6.8
31	3.2	---	41	31	---	128	---	28	---	8.2	5.1	---
TOTAL	535.2	2299.9	3072	1027	1105	5565	5878	5016	395.2	1916.1	295.8	278.8
MEAN	17.3	76.7	99.1	33.1	38.1	180	196	162	13.2	61.8	9.54	9.29
MAX	152	479	372	70	74	645	1400	802	42	633	30	32
MIN	1.1	2.9	39	10	26	41	68	28	6.0	5.3	4.4	4.5
CFSM	.27	1.18	1.52	.51	.58	2.76	3.01	2.49	.20	.95	.15	.14
IN.	.31	1.31	1.75	.59	.63	3.18	3.35	2.86	.23	1.09	.17	.16

CAL YR 1983 TOTAL 39507.0 MEAN 108 MAX 3970 MIN 1.1 CFSM 1.66 IN 22.54
WTR YR 1984 TOTAL 27384.0 MEAN 74.8 MAX 1400 MIN 1.1 CFSM 1.15 IN 15.62

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03302300 LITTLE INDIAN CREEK NEAR GALENA, IN

LOCATION.--Lat 38°19'19", long 85°55'53", in NE¼SW¼ sec.23, T.2 S., R.5 E., Floyd County, Hydrologic Unit 05140104, on right bank at downstream side of county road bridge, 2 miles south of Galena, 3.6 miles upstream from mouth, and 7.0 miles northwest of New Albany.

DRAINAGE AREA.--16.1 mi².

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 703.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--16 years, 24.3 ft³/s, 20.50 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,500 ft³/s July 21, 1973, gage height, 9.30 ft; from rating curve extended above 3,100 ft³/s on basis of contracted-opening measurement at 7.34 ft; no flow for many days in 1969, 1975, 1976, 1983, and 1984.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1490 ft³/s Apr. 22, gage height, 5.88 ft, minimum daily, no flow Oct 1-4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	1.6	20	9.0	6.4	15	28	14	7.8	.64	.07	.30
2	.00	2.6	17	10	16	25	23	12	6.4	.64	3.8	.20
3	.00	3.5	19	17	35	32	35	44	5.3	.64	3.5	.42
4	.00	2.6	38	12	24	51	83	135	4.5	198	3.2	.90
5	1.6	2.1	26	17	19	133	111	56	3.8	36	2.1	.42
6	1.2	1.6	25	19	13	72	59	66	3.2	13	.90	.13
7	.90	1.6	19	18	9.5	43	40	262	2.6	9.3	.64	.13
8	.76	1.4	17	11	7.8	35	33	194	2.3	4.5	2.6	.13
9	.64	1.1	14	9.5	6.4	26	29	77	2.1	3.2	.90	.07
10	.55	2.3	13	14	9.8	22	25	45	1.9	2.6	.55	.13
11	.55	10	230	12	25	20	22	32	1.6	1.9	.30	.13
12	.90	8.2	114	10	27	17	23	24	1.4	1.9	.90	.13
13	9.3	6.0	50	9.0	57	50	34	34	1.4	1.6	.30	.07
14	3.5	4.9	41	7.6	41	45	27	27	1.2	1.2	.13	.13
15	1.9	11	31	6.8	30	35	24	20	1.2	1.1	.03	1.1
16	1.2	16	24	6.4	25	132	24	16	1.1	1.1	.03	.42
17	1.1	13	19	6.0	22	56	25	13	1.1	.90	28	.13
18	1.1	9.8	17	5.4	19	40	24	11	1.1	.71	28	.07
19	1.1	8.2	15	4.7	19	68	21	9.3	1.1	.64	2.9	.03
20	15	23	14	4.1	16	228	19	7.8	.90	.55	1.4	.03
21	25	19	19	3.5	15	94	211	6.4	3.2	.55	.90	.03
22	96	13	55	3.0	13	62	589	6.0	1.2	.42	4.5	.03
23	25	288	27	3.3	12	42	108	209	1.1	.30	3.2	13
24	10	77	19	50	12	39	68	35	1.4	.20	1.4	3.5
25	6.0	40	13	35	17	60	43	20	1.1	.20	.90	2.9
26	4.5	28	11	23	14	53	31	51	.90	.64	.64	1.9
27	3.2	160	10	15	16	47	25	25	.90	1.2	.55	1.1
28	2.9	148	15	12	17	199	21	20	.76	.42	.64	.76
29	2.1	44	18	9.5	15	100	17	16	.76	.30	.90	.64
30	1.9	27	15	7.4	---	51	18	12	.76	.13	.90	.55
31	1.4	---	9.4	6.0	---	36	---	9.8	---	.07	.55	---
TOTAL	219.30	974.5	974.4	376.2	558.9	1928	1840	1509.3	64.08	284.55	95.33	29.48
MEAN	7.07	32.5	31.4	12.1	19.3	62.2	61.3	48.7	2.14	9.18	3.08	.98
MAX	96	288	230	50	57	228	589	262	7.8	198	28	13
MIN	.00	1.1	9.4	3.0	6.4	15	17	6.0	.76	.07	.03	.03
CFSM	.44	2.02	1.95	.75	1.20	3.86	3.81	3.03	.13	.57	.19	.06
IN.	.51	2.25	2.25	.87	1.29	4.45	4.25	3.49	.15	.66	.22	.07

CAL YR 1983 TOTAL 9237.07 MEAN 25.3 MAX 1000 MIN .00 CFSM 1.57 IN 21.34
WTR YR 1984 TOTAL 8854.04 MEAN 24.2 MAX 589 MIN .00 CFSM 1.50 IN 20.46

03302500 INDIAN CREEK NEAR CORYDON, IN

LOCATION.--Lat 38°16'35", long 86°06'35", in SW¼SE¼ sec.6, T.3 S., R.4 E., Harrison County, Hydrologic Unit 05140104, on upstream side of bridge on State Highway 335, 0.6 mile upstream from Raccoon Branch, 4.5 miles north of Corydon, and at mile 33.7.

DRAINAGE AREA.--129 mi², of which 10.6 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1943 to current year. Prior to October 1961, published as Big Indian Creek near Corydon.

REVISED RECORDS.--WSP 1275: Drainage area. WSP 1385: 1951(M).

GAGE.--Water-stage recorder. Datum of gage is 577.12 ft National Geodetic Vertical Datum of 1929. Prior to Dec. 9, 1948, nonrecording gage, and Dec. 9, 1948, to June 12, 1952, recorder records for stages above 6.3 ft at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--41 years, 172 ft³/s, 18.11 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,700 ft³/s Mar. 5, 1964, gage height, 22.64 ft; no flow at times during 1943-44, 1951-54, 1959, 1965, 1972-73, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4160 ft³/s Apr. 22, gage height, 13.19 ft.; minimum daily discharge, 0.22 ft³/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.27	21	222	78	68	133	236	120	73	9.0	7.0	8.5
2	.27	21	178	80	82	258	194	100	61	8.5	7.6	7.3
3	.22	23	163	123	216	317	186	148	52	8.0	15	7.3
4	1.2	28	289	103	222	936	405	666	45	1200	27	7.6
5	4.1	23	261	130	150	605	760	426	40	950	15	7.6
6	8.2	20	227	150	119	386	497	319	34	160	13	9.2
7	7.0	18	186	141	78	305	337	1090	30	100	11	7.6
8	5.7	17	157	96	72	234	258	1400	26	70	16	6.2
9	4.7	17	136	82	66	205	222	671	23	52	25	5.4
10	4.3	18	122	110	79	184	192	392	21	40	14	5.2
11	3.9	40	415	94	141	159	163	276	20	32	10	5.0
12	3.9	79	1110	78	213	271	145	207	18	25	8.9	4.5
13	15	56	468	77	334	305	194	225	17	19	7.6	4.1
14	33	46	358	66	281	310	172	253	16	18	6.2	4.1
15	11	45	308	55	216	261	152	172	14	17	5.2	4.3
16	5.0	103	236	57	184	1070	150	141	15	16	4.7	4.1
17	2.7	117	188	53	167	588	154	117	20	15	16	4.3
18	2.3	97	163	49	143	405	147	100	14	14	790	4.1
19	2.0	79	135	38	122	461	135	87	13	13	83	5.7
20	6.2	94	120	34	110	1300	120	76	12	12	41	5.2
21	258	188	123	29	101	898	457	67	11	11	26	4.7
22	727	128	389	26	93	552	2930	61	11	10	22	4.1
23	540	1600	231	27	90	361	1060	950	12	9.5	28	12
24	186	1040	155	390	117	289	593	303	23	8.9	26	79
25	116	379	120	433	108	422	392	186	15	8.2	16	33
26	79	248	105	182	113	471	284	241	13	7.9	13	23
27	59	548	90	130	123	386	222	188	12	8.2	11	15
28	44	1530	110	111	108	750	184	148	11	8.9	11	11
29	34	497	140	94	100	988	152	123	10	9.5	9.9	8.9
30	28	305	117	79	---	433	147	103	9.5	8.9	11	7.3
31	23	---	89	67	---	300	---	88	---	7.9	10	---
TOTAL	2214.96	7425	7111	3262	4016	14543	11240	9444	691.5	2877.4	1307.1	315.3
MEAN	71.5	248	229	105	138	469	375	305	23.1	92.8	42.2	10.5
MAX	727	1600	1110	433	334	1300	2930	1400	73	1200	790	79
MIN	.22	17	89	26	66	133	120	61	9.5	7.9	4.7	4.1
CFSM	.55	1.92	1.78	.81	1.07	3.64	2.91	2.36	.18	.72	.33	.08
IN.	.64	2.14	2.05	.94	1.16	4.19	3.24	2.72	.20	.83	.38	.09

CAL YR 1983 TOTAL 73390.13 MEAN 201 MAX 6620 MIN .22 CFSM 1.56 IN 21.16
WTR YR 1984 TOTAL 64447.26 MEAN 176 MAX 2930 MIN .22 CFSM 1.36 IN 18.58

03302680 WEST FORK BLUE RIVER AT SALEM, IN

LOCATION.--Lat 38°36'19", long 86°05'40", in SW¼SE¼ sec.17, T.2 N., R.4 E., Washington County, Hydrologic Unit 05140104, on left bank at downstream side of bridge on East Market Street, 0.35 mile east of County Court House in Salem, 6.0 miles upstream from Hoggatt Branch, and 6.9 miles upstream from mouth.

DRAINAGE AREA.--19.0 mi².

PERIOD OF RECORD.--July 1970 to current year. Prior to December 10, 1970, nonrecording gage at site 0.35 mile downstream at datum 5.04 ft lower. Low-flow records not equivalent due to effluent from factory entering stream from right bank between sites.

GAGE.--Water-stage recorder. Datum of gage is 713.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--14 years, 24.8 ft³/s, 17.73 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,400 ft³/s May 1, 1983, gage height, 13.14 ft from rating curve extended above 900 ft³/s by a step-backwater analysis; minimum daily, 0.02 ft³/s Sept. 24, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 900 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 22	1200	1920	8.86	Apr. 22	0045	*2580	*10.01
Nov. 27	1830	1200	7.21	July 4	0430	1960	8.95

Minimum daily discharge, 0.03 ft³/s Sept. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	8.0	37	9.2	7.5	16	41	20	7.4	.12	.27	.05
2	.05	7.4	31	12	13	20	32	17	6.9	.11	.84	.05
3	.03	7.4	31	10	38	31	33	30	5.9	.10	.84	.11
4	.45	5.9	71	28	19	43	71	238	4.9	297	.45	.07
5	3.7	5.9	51	22	13	190	149	81	4.1	83	.27	.06
6	1.4	5.4	44	25	9.8	114	90	71	3.3	24	.20	.06
7	.55	4.9	31	13	8.4	71	60	140	2.9	16	.17	.06
8	.35	4.1	27	7.4	7.2	53	47	110	2.0	11	.17	.06
9	.27	3.6	23	6.9	6.4	36	41	73	1.7	8.6	.11	.05
10	.20	7.4	20	7.4	10	30	34	50	1.4	7.4	.11	.06
11	.20	21	98	8.6	15	27	29	38	1.2	5.4	.11	.10
12	.45	14	145	6.4	21	22	30	28	1.0	4.5	.11	.05
13	8.6	13	83	4.5	44	38	43	32	.84	3.7	.11	.05
14	4.5	11	71	4.1	37	41	33	22	2.6	3.3	.10	.05
15	2.0	22	50	3.7	28	39	28	16	1.2	2.6	.08	.06
16	1.2	29	36	3.3	25	145	29	14	.84	2.3	.07	.05
17	.84	25	29	3.2	23	81	38	13	.84	2.0	.07	.05
18	13	21	25	2.9	20	58	34	11	.69	1.7	.07	.04
19	8.0	17	21	2.7	21	58	30	10	2.3	1.2	.07	.05
20	320	24	17	2.5	16	190	27	9.8	.84	1.0	.06	.04
21	147	23	24	2.3	15	122	524	9.2	1.2	1.0	.06	.04
22	524	18	54	2.2	13	92	650	9.2	.84	.84	.11	.05
23	152	235	24	2.4	13	63	166	20	.69	.69	.08	.55
24	73	140	16	60	13	54	108	9.8	1.0	.55	.07	.17
25	46	76	13	28	18	76	86	9.2	.69	.45	.06	1.2
26	32	50	11	41	18	79	53	22	.35	2.0	.06	5.4
27	24	345	15	13	20	69	41	12	.45	6.9	.06	1.2
28	17	200	19	8.8	21	182	33	13	.35	1.4	.12	.55
29	15	88	12	7.7	16	124	28	12	.20	.55	.06	.27
30	12	51	9.8	6.8	---	73	30	10	.17	.35	.06	.20
31	9.8	---	9.2	6.4	---	53	---	9.2	---	.27	.06	---
TOTAL	1417.67	1483.0	1148.0	361.4	529.3	2290	2638	1159.4	58.79	490.03	5.08	10.80
MEAN	45.7	49.4	37.0	11.7	18.3	73.9	87.9	37.4	1.96	15.8	.16	.36
MAX	524	345	145	60	44	190	650	238	7.4	297	.84	5.4
MIN	.03	3.6	9.2	2.2	6.4	16	27	9.2	.17	.10	.06	.04
CFSM	2.41	2.60	1.95	.62	.96	3.89	4.63	1.97	.10	.83	.008	.02
IN.	2.78	2.90	2.25	.71	1.04	4.48	5.16	2.27	.12	.96	.01	.02

CAL YR 1983 TOTAL 13142.02 MEAN 36.0 MAX 1540 MIN .03 CFSM 1.90 IN 25.73
WTR YR 1984 TOTAL 11591.47 MEAN 31.7 MAX 650 MIN .03 CFSM 1.67 IN 22.69

03302800 BLUE RIVER AT FREDERICKSBURG, IN

LOCATION.--Lat 38°26'02", long 86°11'31", in NE¼NW¼ sec.16, T.1 S., R.3 E., Washington County, Hydrologic Unit 05140104, on downstream side of bridge on U.S. Highway 150 at Fredericksburg, 0.5 mile downstream from South Fork Blue River, and at mile 57.1.

DRAINAGE AREA.--283 mi^2, of which 76.9 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--June 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 590.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--16 years, 341 ft^3/s, 16.34 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,500 ft^3/s May 2, 1983, gage height, 24.37 ft,; minimum daily, 6.1 ft^3/s Oct. 18, 1968.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959 reached a stage of 29.20 ft, from floodmark, on left upstream wingwall.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 5,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 23	0100	5780	15.14	Apr. 22	1600	*9,960	*20.71
Nov. 28	0600	6350	16.05				

Minimum daily discharge, 7.0 ft^3/s Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	110	540	119	172	196	512	184	133	19	20	11
2	7.0	99	431	121	235	211	411	146	119	18	21	9.5
3	8.7	91	388	198	385	393	312	153	104	22	20	11
4	11	86	625	155	480	446	618	2150	88	770	22	14
5	21	76	631	312	317	1180	1900	1120	79	631	20	17
6	25	68	540	277	244	1350	1210	734	73	368	17	13
7	17	64	431	277	163	782	754	1500	66	222	16	11
8	14	60	352	176	153	603	512	1860	60	135	25	9.1
9	13	54	302	146	152	455	322	1080	54	99	22	8.6
10	13	56	268	155	150	374	268	734	48	86	36	8.6
11	13	110	443	135	215	325	213	563	45	67	25	8.6
12	15	217	2300	114	270	277	180	440	44	45	16	8.6
13	22	157	1140	117	452	346	272	408	42	39	13	8.6
14	33	131	823	102	515	551	237	483	37	37	12	8.6
15	30	128	744	89	388	455	192	330	35	34	10	9.5
16	24	280	557	88	325	1310	180	272	35	34	10	10
17	22	304	431	85	302	986	220	228	36	32	33	9.1
18	30	253	357	76	268	701	231	200	34	30	231	8.6
19	84	215	289	65	258	695	192	180	32	28	64	7.7
20	344	213	258	55	233	1920	165	163	30	26	42	7.3
21	1500	374	249	44	205	1840	258	146	29	25	33	7.3
22	1950	280	618	45	188	1120	8580	133	36	24	22	8.6
23	2750	1380	440	51	176	788	2800	300	35	22	19	26
24	731	2430	292	374	166	634	1320	460	75	20	17	60
25	483	880	228	1240	209	698	778	280	45	19	17	34
26	357	581	200	455	235	923	543	240	29	22	13	25
27	275	908	190	452	228	795	395	290	24	49	12	31
28	213	4310	205	285	247	960	302	250	23	58	12	23
29	174	1210	242	237	222	1880	228	210	21	42	14	18
30	143	748	148	196	---	890	237	176	20	26	13	14
31	124	---	128	165	---	643	---	152	---	22	12	---
TOTAL	9455.0	15873	14790	6406	7553	24727	24343	15565	1531	3071	859	446.3
MEAN	305	529	477	207	260	798	811	502	51.0	99.1	27.7	14.9
MAX	2750	4310	2300	1240	515	1920	8580	2150	133	770	231	60
MIN	7.0	54	128	44	150	196	165	133	20	18	10	7.3
CFSM	1.08	1.87	1.69	.73	.92	2.82	2.87	1.77	.18	.35	.10	.05
IN.	1.24	2.09	1.94	.84	.99	3.25	3.20	2.05	.20	.40	.11	.06

CAL YR 1983 TOTAL 160917.3 MEAN 441 MAX 10800 MIN 6.7 CFSM 1.56 IN 21.15
WTR YR 1984 TOTAL 124519.3 MEAN 340 MAX 8580 MIN 7.0 CFSM 1.20 IN 16.38

03303000 BLUE RIVER NEAR WHITE CLOUD, IN

LOCATION.--Lat 38°14'15", long 86°13'42", in NW¼SE¼ sec.19, T.3 S., R.3 E., Harrison County, Hydrologic Unit 05140104, on left bank 400 ft downstream from Spring Creek, 600 ft upstream from bridge on Interstate 64, 0.2 mile upstream from bridge on State Highway 62, 0.8 mile north of White Cloud, and at mile 14.7 .

DRAINAGE AREA.--476 mi², of which 192 mi² does not contribute directly to surface runoff. Also, part of flow from Indian Creek, downstream from Corydon, IN, enters Blue River via solution channel in Karst area through Harrison Spring.

PERIOD OF RECORD.--October 1930 to current year. Monthly figures only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1921-32, 1933(M), 1935-38(M), 1944. WSP 1385: Drainage area. WSP 1555: 1953. WDR IN-75-1: 1973.

GAGE.--Water-stage recorder. Datum of gage is 434.26 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Nov. 16, 1938, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--54 years, 636 ft³/s, 18.14 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,500 ft³/s Jan. 22, 1959, gage height, 23.07 ft; minimum daily, 9.6 ft³/s Oct. 17, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 7,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 23	0400	*13,300	*14.73

Minimum daily discharge, 27 ft³/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	212	1210	370	411	532	1160	896	375	69	85	70
2	28	200	969	388	434	527	972	746	344	67	85	66
3	27	191	852	436	657	770	860	717	316	64	141	66
4	36	174	1030	478	1030	1040	1200	1980	295	1830	107	70
5	57	160	1300	497	815	1760	3240	3320	273	2180	127	65
6	59	152	1120	651	651	2880	2910	1730	258	1270	116	61
7	59	141	971	619	536	1860	1870	2570	237	696	88	61
8	60	136	806	540	437	1330	1360	3610	215	490	77	62
9	56	129	719	424	414	1060	1130	2550	194	356	71	59
10	45	135	647	420	421	847	976	1740	178	297	93	56
11	40	192	846	419	506	736	852	1320	164	264	105	53
12	39	275	2940	385	634	656	757	1050	162	243	108	51
13	67	357	2580	343	887	666	819	1030	155	221	95	50
14	90	295	1740	342	1180	922	899	1160	137	192	67	56
15	108	285	1590	317	973	945	771	889	128	173	57	75
16	84	340	1290	302	809	2160	717	725	122	193	53	61
17	79	500	1020	294	730	2470	713	631	135	164	55	54
18	76	493	867	284	676	1620	754	560	124	143	419	51
19	87	429	759	220	631	1400	708	508	114	128	498	49
20	198	425	664	190	603	2630	644	456	104	119	241	53
21	1730	565	639	170	557	4030	1220	428	99	112	182	58
22	2020	613	1100	175	518	2540	10200	396	127	106	156	61
23	4330	1610	1250	185	492	1860	9120	1090	124	100	167	125
24	1560	4370	840	460	475	1450	3430	1200	269	95	141	226
25	861	2070	550	1750	489	1460	2310	671	133	89	120	316
26	637	1310	510	1180	552	2000	1720	614	102	93	98	218
27	495	1520	470	903	575	1810	1360	741	91	141	88	145
28	411	5890	560	766	581	1700	1140	571	83	125	85	107
29	338	3040	621	582	576	2950	952	499	80	142	84	94
30	284	1690	484	512	---	2080	936	458	74	137	84	81
31	241	---	394	452	---	1460	---	410	---	102	78	---
TOTAL	14231	27899	31338	15054	18250	50151	55700	35276	5212	10401	3971	2620
MEAN	459	930	1011	486	629	1618	1857	1138	174	336	128	87.3
MAX	4330	5890	2940	1750	1180	4030	10200	3610	375	2180	498	316
MIN	27	129	394	170	411	527	644	396	74	64	53	49
CFSM	.96	1.95	2.12	1.02	1.32	3.40	3.90	2.39	.37	.71	.27	.18
IN.	1.11	2.18	2.45	1.18	1.43	3.92	4.35	2.76	.41	.81	.31	.20

CAL YR 1983 TOTAL 325087 MEAN 891 MAX 22200 MIN 27 CFSM 1.87 IN 25.41
WTR YR 1984 TOTAL 270103 MEAN 738 MAX 10200 MIN 27 CFSM 1.55 IN 21.11

03303300 MIDDLE FORK ANDERSON RIVER AT BRISTOW, IN

LOCATION.--Lat 38°08'19", long 86°43'16", in SW¼ NE¼ sec.27, T.4 S., R.3 W., Perry County, Hydrologic Unit 05140201, on left bank at downstream side of bridge on State Highway 145 at Bristow, 2.0 miles downstream from Coon Branch, 5.8 miles upstream from Sulphur Fork Creek, and at mile 14.1.

DRAINAGE AREA.--39.8 mi².

PERIOD OF RECORD.--August 1961 to current year.

REVISED RECORDS.--WDR IN-72-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 395.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Forest Service and Middle Fork Anderson River Conservancy District control structures beginning June 1967.

AVERAGE DISCHARGE.--23 years, 59.3 ft³/s, 20.23 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,360 ft³/s Mar. 9, 1964; maximum gage height, 19.33 ft Mar. 4, 1964; no flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959, reached a stage of 20.0 ft, from floodmark, discharge, 15,000 ft³/s, from rating curve extended above 7,000 ft³/s. This is the maximum flood since 1905, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 786 ft³/s Mar. 16, gage height, 13.84 ft; No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.97	5.8	75	18	33	41	78	82	24	2.8	1.8	.00
2	.32	6.2	54	18	35	56	63	66	20	2.8	2.0	.00
3	.18	6.2	58	17	77	95	64	59	16	2.8	1.8	.00
4	.67	4.7	105	17	83	145	113	126	13	3.5	1.8	.00
5	.67	3.9	86	22	65	347	237	149	11	20	1.6	.00
6	.45	3.2	72	26	50	304	222	118	14	28	1.3	.00
7	.45	3.1	56	26	38	180	142	182	11	17	3.5	.00
8	.27	2.6	47	24	31	112	99	286	8.0	9.0	1.2	.00
9	.14	2.4	40	23	29	78	83	199	6.7	5.1	.97	.00
10	.06	2.7	35	29	40	61	76	119	5.5	3.5	1.2	.00
11	.06	3.3	83	27	59	52	64	81	4.7	2.6	1.1	.00
12	.14	4.3	246	24	77	47	75	58	4.4	2.2	1.1	.00
13	.51	4.8	171	23	224	64	148	75	4.1	1.5	1.1	.00
14	.18	5.3	146	20	182	70	116	127	4.1	1.3	.97	.00
15	.14	6.4	135	18	115	81	88	97	3.8	1.3	1.1	.00
16	.14	8.7	95	16	81	549	75	65	3.8	1.5	.86	.00
17	.06	9.1	66	14	63	382	78	47	4.1	1.5	.51	.00
18	1.3	8.6	51	13	53	288	73	37	3.8	1.5	.45	.00
19	2.0	7.1	41	11	52	199	63	31	4.1	1.5	.23	.00
20	8.5	40	35	9.4	46	316	55	27	3.8	1.3	.10	.00
21	13	63	43	8.2	41	295	180	24	3.5	1.3	.06	.00
22	77	43	155	7.8	36	233	448	21	3.5	1.2	.06	.00
23	102	313	112	7.4	33	156	369	141	4.1	1.1	.10	4.7
24	54	396	81	50	33	118	296	99	3.5	1.1	.06	29
25	31	309	50	98	49	159	178	60	3.0	1.1	.03	61
26	20	129	35	78	48	174	111	79	2.8	1.3	.00	39
27	12	241	30	64	48	146	80	106	2.8	1.3	.00	20
28	7.7	419	27	49	48	173	63	77	2.8	1.5	.06	8.5
29	6.2	321	29	42	44	214	54	52	2.8	2.0	.00	5.1
30	6.2	161	23	38	---	150	80	38	2.8	2.0	.00	4.4
31	6.0	---	20	33	---	105	---	30	---	1.8	.00	---
TOTAL	352.31	2533.4	2302	870.8	1813	5390	3871	2758	201.5	126.4	25.06	171.70
MEAN	11.4	84.4	74.3	28.1	62.5	174	129	89.0	6.72	4.08	.81	5.72
MAX	102	419	246	98	224	549	448	286	24	28	3.5	61
MIN	.06	2.4	20	7.4	29	41	54	21	2.8	1.1	.00	.00
CFSM	.29	2.12	1.87	.71	1.57	4.37	3.24	2.24	.17	.10	.02	.14
IN.	.33	2.37	2.15	.81	1.69	5.04	3.62	2.58	.19	.12	.02	.16

CAL YR 1983 TOTAL 30119.84 MEAN 82.5 MAX 1030 MIN .00 CFSM 2.09 IN 28.43
WTR YR 1984 TOTAL 20415.17 MEAN 55.8 MAX 549 MIN .00 CFSM 1.40 IN 19.08

03303400 CROOKED CREEK NEAR SANTA CLAUS, IN

LOCATION.--Lat 38°07'05", long 86°53'24", in SW¼SE¼ sec. 31, T.4 S., R.4 W., Spencer County, Hydrologic Unit 05140201, on right bank at upstream side of bridge on county road, 1.3 miles east of Santa Claus Post Office, and 1.8 miles upstream from unnamed right-bank tributary.

DRAINAGE AREA.--7.86 mi².

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 404.34 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--15 years, 11.4 ft³/s, 19.70 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,100 ft³/s Apr. 28, 1970, gage height, 9.74 ft, from rating curve extended above 450 ft³/s on basis of two indirect measurements of peak flow at site 1.6 miles downstream, drainage area, 16.0 mi², adjusted to gage site; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 16	0115	*1220	*9.24

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.46	.00	4.1	1.9	4.0	6.1	9.6	10	1.4	12	.00	.00
2	.22	.00	4.2	2.0	5.4	27	7.6	7.0	1.7	2.3	.00	.00
3	.00	.28	19	3.0	31	23	17	14	1.2	.36	.00	.00
4	.42	.17	29	2.5	12	59	43	60	1.0	3.0	.00	.00
5	1.7	.00	11	4.7	7.8	96	70	16	1.2	28	.00	.00
6	.28	.00	9.3	2.1	5.6	24	21	20	.00	2.6	.00	.00
7	.28	.00	5.6	2.4	4.3	12	12	79	.00	2.0	.00	.00
8	.00	.00	4.4	1.6	3.2	9.3	9.9	36	.00	.46	.00	.00
9	.00	.00	3.6	2.1	3.0	6.4	18	15	.00	.28	.00	.00
10	.00	.58	3.3	4.1	15	5.6	15	8.3	.22	.17	.00	.00
11	.00	1.2	61	1.7	24	5.1	11	6.5	.11	.22	.00	.00
12	.00	.65	55	1.2	19	4.6	30	5.4	.28	.17	2.1	.00
13	.11	.46	16	1.0	59	9.5	29	15	.11	.50	.00	.00
14	.06	.36	37	.94	16	7.1	15	7.5	.00	.58	.00	.00
15	.00	.65	17	.88	9.6	41	11	4.8	.00	.28	.00	.00
16	.00	.73	5.4	.84	7.5	235	10	3.7	.00	.00	.00	.00
17	.00	1.0	4.0	.80	6.1	30	11	3.0	.00	.06	2.0	.00
18	5.4	.87	3.0	.76	5.5	21	9.0	2.6	1.4	.11	.46	.00
19	.36	.73	2.3	.74	6.1	43	7.5	2.2	5.8	.17	.00	.00
20	27	7.5	2.1	.70	4.6	122	6.2	2.0	18	.87	.00	.00
21	8.7	3.4	19	.68	4.0	43	107	1.8	4.7	.58	.00	.00
22	48	2.0	41	.66	3.5	26	95	1.9	1.6	.00	.00	.00
23	8.3	114	14	4.5	3.2	15	33	31	1.1	.00	.00	.00
24	2.7	23	23	15	4.0	21	21	5.1	.80	.00	.00	42
25	1.3	7.1	9.0	40	8.2	57	13	4.2	.36	.00	.00	11
26	.73	4.2	5.0	6.4	5.6	27	9.0	5.7	.17	.00	.00	2.3
27	.73	120	3.2	4.5	6.4	24	7.5	2.8	.00	.00	.00	.42
28	.58	53	2.6	4.0	6.0	66	6.0	2.6	.00	.00	.00	.00
29	.65	6.3	2.9	3.5	6.0	27	5.3	2.0	.00	.00	.00	.00
30	.22	6.0	2.4	3.2	---	15	37	1.7	.00	.00	.00	.00
31	.06	---	2.1	3.2	---	13	---	1.5	---	.00	.00	---
TOTAL	108.26	354.18	420.5	121.60	295.6	1120.7	696.6	378.3	41.15	54.71	4.56	55.72
MEAN	3.49	11.8	13.6	3.92	10.2	36.2	23.2	12.2	1.37	1.76	.15	1.86
MAX	48	120	61	40	59	235	107	79	18	28	2.1	42
MIN	.00	.00	2.1	.66	3.0	4.6	5.3	1.5	.00	.00	.00	.00
CFSM	.44	1.50	1.73	.50	1.30	4.61	2.95	1.55	.17	.22	.02	.24
IN.	.51	1.68	1.99	.58	1.40	5.30	3.30	1.79	.19	.26	.02	.26

CAL YR 1983 TOTAL 5080.81 MEAN 13.9 MAX 576 MIN .00 CFSM 1.77 IN 24.04
WTR YR 1984 TOTAL 3651.88 MEAN 9.98 MAX 235 MIN .00 CFSM 1.27 IN 17.28

03322100 PIGEON CREEK AT EVANSVILLE, IN

LOCATION.--Lat 38°00'14", long 87°32'19", in NE¼NW¼ sec.16, T.6 S., R.10 W., Vanderburgh County, Hydrologic Unit 05140202, on left bank in the median strip of old U.S. Highway 41, between two steel truss bridges, at Evansville, and at mile 6.0.

DRAINAGE AREA.--323 mi².

PERIOD OF RECORD.--October 1960 to current year.

REVISED RECORDS.--WSP 2109: 1960. WDR IN-72-1: 1971.

GAGE.--Water-stage recorder. Datum of gage is 352.24 ft National Geodetic Vertical Datum of 1929. Nonrecording auxiliary gage at site 1.2 miles upstream at same datum. Prior to October 1, 1968, water-stage recorder, and October 1, 1968, to September 30, 1971, nonrecording gage used at site 1.2 miles upstream, as base gage, and present base gage was used as auxiliary gage.

REMARKS.--Records good except those for winter periods and periods of backwater effect, which are poor. Backwater or reverse flow from the Ohio River generally occurs when the stage of the Ohio River at Evansville (Sta. 03322000) exceeds a gage height of about 24 ft.

AVERAGE DISCHARGE.--24 years, 368 ft³/s, 15.49 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,100 ft³/s May 10, 1961, gage height, 27.94 ft; minimum daily (unaffected by backwater), 1.0 ft³/s Aug. 30 to Sept. 1, Oct. 11, 12, 21, 22, 26, 1964; zero or reverse flow occurs at times due to extreme stages on the Ohio River.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 3,360 ft³/s Mar 20; maximum gage height (affected by backwater), 17.67 ft May 13; minimum daily discharge, 6.4 ft³/s, Oct. 3.

NOTE.--Backwater from Ohio River, Dec. 1-3, 8-19, Feb. 16-24, Mar. 2-10, Mar. 21 to Apr. 16, Apr. 24 to May 3, May 6-21, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	26	156	25	122	188	1090	894	49	20	8.5	9.7
2	6.7	25	88	31	180	298	187	552	122	25	8.2	9.3
3	6.4	22	140	42	565	1210	427	450	179	38	8.2	35
4	40	23	512	56	873	1730	1210	1440	53	43	8.2	19
5	111	23	386	95	238	2470	1840	1430	43	354	9.7	31
6	274	19	421	168	103	2170	2120	826	40	253	11	26
7	72	16	506	224	84	1920	1570	1340	41	79	12	20
8	28	18	83	158	68	1130	678	1520	37	53	11	16
9	17	17	.00	91	59	382	329	1110	37	34	23	17
10	11	22	.00	94	147	235	624	501	36	29	16	19
11	9.1	21	541	114	711	225	488	754	38	24	20	73
12	8.0	38	1380	55	852	177	767	834	137	20	44	46
13	11	42	525	40	1290	207	1270	932	100	17	13	32
14	9.0	30	513	32	1130	276	1250	1020	33	15	9.9	26
15	12	37	903	26	475	419	764	717	27	15	9.4	22
16	11	27	142	23	300	2840	548	552	28	17	8.7	21
17	9.7	24	.00	21	186	2160	748	249	24	17	7.9	18
18	72	22	25	18	.00	2090	471	220	43	16	70	16
19	97	19	136	17	.00	2260	304	192	53	13	24	16
20	136	44	167	16	.00	3360	220	134	59	14	19	13
21	351	72	94	15	36	2640	1200	125	164	13	16	12
22	274	67	252	14	119	2670	2920	79	459	12	16	11
23	199	710	279	13	312	2700	3010	100	664	12	17	165
24	119	1120	114	143	198	1990	2690	88	165	11	33	1200
25	75	498	60	818	328	1930	2650	87	67	9.0	20	948
26	50	162	45	848	217	1370	1970	219	44	8.4	13	608
27	39	678	30	590	151	1580	1180	319	32	7.9	10	424
28	31	1560	34	338	165	2490	761	80	26	6.8	12	145
29	26	1230	32	146	169	2360	759	96	23	39	12	97
30	22	623	28	122	---	1780	1280	71	22	17	11	69
31	20	---	24	136	---	1690	---	53	---	9.0	9.7	---
TOTAL	2153.9	7235	7616.00	4529	9078.00	48947	35325	16984	2845	1241.1	511.4	4164.0
MEAN	69.5	241	246	146	313	1579	1178	548	94.8	40.0	16.5	139
MAX	351	1560	1380	848	1290	3360	3010	1520	664	354	70	1200
MIN	6.4	16	.00	13	.00	177	187	53	22	6.8	7.9	9.3
CFSM	.22	.75	.76	.45	.97	4.89	3.65	1.70	.29	.12	.05	.43
IN.	.25	.83	.88	.52	1.05	5.64	4.07	1.96	.33	.14	.06	.48

CAL YR 1983 TOTAL 198128.10 MEAN 543 MAX 8640 MIN .00 CFSM 1.68 IN 22.82
WTR YR 1984 TOTAL 140629.40 MEAN 384 MAX 3360 MIN .00 CFSM 1.19 IN 16.20

03322500 WABASH RIVER NEAR NEW CORYDON, IN

LOCATION.--Lat 40°33'50", long 84°48'10", in NE¼SE¼ sec.3, T.24 N., R.15 E., Jay County, Hydrologic Unit 05120101, on left bank 10 ft downstream from county bridge on Indiana-Ohio State line road, 2 miles east of New Corydon, 2.8 miles downstream from Beaver Creek, and at mile 466.0.

DRAINAGE AREA.--262 mi².

PERIOD OF RECORD.--April 1951 to current year.

REVISED RECORDS.--WSP 1555: 1957(P). WSP 1909: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 830.10 ft National Geodetic Vertical Datum of 1929. Prior to June 24, 1953, nonrecording gage at same site and datum.

REMARKS.--Records good. Occasional regulation by Grand Lake, diversion from or into St. Marys River basin, and into Miami and Erie Canal.

AVERAGE DISCHARGE.--33 years, 202 ft³/s, 10.47 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,720 ft³/s Jan. 22, 1959; gage height, 20.47 ft, from floodmarks; minimum daily, 0.8 ft³/s Dec. 22, 23, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 16	2200	3500	17.43	Apr. 17	1000	2650	16.69
Apr. 6	0400	3040	17.04	Apr. 23	0200	*3520	*17.45

Minimum daily discharge, 4.9 ft³/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	13	332	130	28	135	367	365	134	26	11	11
2	5.0	14	276	125	25	116	344	347	120	24	17	15
3	4.9	37	254	120	400	195	334	350	107	23	32	18
4	5.5	42	516	120	500	200	477	354	97	40	17	25
5	6.2	36	956	115	300	230	1650	332	93	370	17	16
6	16	28	1230	115	200	270	2680	319	90	540	22	14
7	12	22	1100	110	140	290	1510	310	86	680	15	13
8	9.0	17	511	105	100	280	835	300	77	440	20	15
9	9.0	16	353	105	85	260	553	290	67	80	93	11
10	7.5	20	318	100	150	230	443	280	62	62	34	11
11	6.5	481	675	100	1000	200	395	267	57	52	21	13
12	5.4	293	1780	98	900	190	362	185	57	43	47	11
13	13	112	1060	96	802	185	359	143	54	38	29	11
14	30	67	571	96	645	200	374	124	57	30	20	9.9
15	21	225	460	93	383	240	739	114	73	27	15	12
16	14	1100	333	92	282	2380	1500	106	61	24	12	12
17	10	578	274	90	268	2770	2400	100	55	22	11	9.5
18	7.3	310	265	88	291	1460	1680	93	46	19	47	7.7
19	10	255	317	86	311	759	1030	87	42	18	24	8.2
20	12	244	370	84	257	1070	680	102	45	17	11	6.9
21	26	278	280	82	183	1830	532	175	45	16	8.6	8.6
22	155	230	250	81	143	1490	1590	157	40	15	11	11
23	333	317	230	79	120	1020	3000	677	45	15	20	12
24	143	686	200	40	109	837	2180	440	70	15	14	14
25	66	353	190	28	161	1110	1310	224	115	15	11	19
26	40	241	180	50	324	1530	812	205	70	15	9.9	24
27	28	226	170	150	219	985	584	154	48	15	7.7	23
28	22	1640	155	80	163	776	480	205	40	27	7.7	23
29	20	1250	150	50	133	589	425	393	33	17	9.0	19
30	17	531	140	40	---	462	403	213	29	14	9.9	23
31	15	---	135	30	---	402	---	159	---	11	9.9	---
TOTAL	1074.4	9662	14031	2778	8622	22691	30028	7570	2015	2750	633.7	426.8
MEAN	34.7	322	453	89.6	297	732	1001	244	67.2	88.7	20.4	14.2
MAX	333	1640	1780	150	1000	2770	3000	677	134	680	93	25
MIN	4.9	13	135	28	25	116	334	87	29	11	7.7	6.9
CFSM	.13	1.23	1.73	.34	1.13	2.79	3.82	.93	.26	.34	.08	.05
IN.	.15	1.37	1.99	.39	1.22	3.22	4.26	1.07	.29	.39	.09	.06

CAL YR 1983 TOTAL 58480.4 MEAN 160 MAX 2510 MIN 4.9 CFSM .61 IN 8.30
WTR YR 1984 TOTAL 102281.9 MEAN 279 MAX 3000 MIN 4.9 CFSM 1.07 IN 14.52

03322900 WABASH RIVER AT LINN GROVE, IN

LOCATION.--Lat 40°39'22", long 85°01'58", in SE¼SE¼ sec.34, T.26 N., R.13 E., Adams County, Hydrologic Unit 05120101, on right bank 10 ft downstream from bridge on State Highway 218, 800 ft downstream from Shoemaker ditch, 0.8 mile north of Linn Grove, and 2.2 miles upstream from Rice ditch.

DRAINAGE AREA.--453 mi^2.

PERIOD OF RECORD.--September 1964 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 808.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which is fair. Occasional regulation of Grand Lake, diversion from or into St. Marys River basin, and into Miami and Erie Canal.

AVERAGE DISCHARGE.--20 years, 377 ft^3/s, 11.30 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,560 ft^3/s Mar. 17, 1978, gage height, 13.87 ft; minimum daily, 5.1 ft^3/s Oct. 8, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in April 1964 reached a stage of 13.13 ft, from floodmark, discharge, 6,900 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,900 ft^3/s and maximum(*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 14	0200	2370	9.45	Mar. 27	1100	2410	9.17
Feb. 12	2300	2850	9.80	Apr. 7	1000	3790	10.97
Mar. 18	1300	*4510	*11.73	Apr. 19	0100	2760	9.68
Mar. 22	2100	3160	10.20	Apr. 24	1500	4170	11.37

Minimum daily discharge, 7.1 ft^3/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	18	1250	260	50	204	594	515	276	41	23	13
2	7.8	20	708	250	44	170	511	457	223	38	23	13
3	7.1	23	462	240	200	190	476	443	191	35	29	16
4	7.9	32	621	230	1000	240	654	450	162	72	43	20
5	10	45	1220	220	600	320	1580	432	150	552	30	24
6	9.5	39	1630	210	350	370	2660	407	140	849	24	19
7	25	33	1820	210	250	440	3700	393	129	1020	29	17
8	20	27	1790	200	185	380	3030	383	119	626	25	16
9	14	23	1230	190	150	340	1920	370	107	267	465	15
10	12	22	745	190	350	310	1060	353	91	131	297	17
11	12	308	900	180	1000	300	675	346	85	131	79	15
12	12	777	1860	180	1900	290	544	407	78	93	40	15
13	15	355	2220	175	2570	280	519	307	84	60	55	14
14	19	160	2260	170	773	285	503	232	256	49	39	14
15	34	153	1660	165	773	307	773	191	148	43	28	14
16	25	1060	1060	165	907	1960	1370	164	112	36	22	14
17	19	1280	614	160	671	3320	1900	148	90	33	20	14
18	16	875	450	160	666	4420	2520	137	76	31	61	14
19	14	494	442	155	638	3400	2600	129	64	28	94	13
20	13	397	513	155	582	2530	1980	155	58	26	45	12
21	16	400	588	150	421	2500	1230	393	58	26	22	13
22	51	384	547	150	310	3000	1310	360	53	24	19	12
23	326	369	480	145	244	2980	2570	687	73	23	20	13
24	380	973	430	145	207	2410	4020	971	101	23	22	16
25	178	889	390	60	316	2050	3680	533	199	25	21	16
26	87	502	370	49	544	2190	2690	476	135	40	17	18
27	50	371	340	170	472	2390	1700	373	82	43	15	21
28	33	1280	330	350	261	2090	999	353	75	59	14	24
29	25	1660	300	200	191	1540	683	975	53	46	13	22
30	21	1750	290	130	---	1060	582	650	45	29	12	23
31	19	---	270	90	---	760	---	376	---	25	12	---
TOTAL	1486.0	14719	27790	5504	16625	43026	49033	12566	3513	4524	1658	487
MEAN	47.9	491	896	178	573	1388	1634	405	117	146	53.5	16.2
MAX	380	1750	2260	350	2570	4420	4020	975	276	1020	465	24
MIN	7.1	18	270	49	44	170	476	129	45	23	12	12
CFSM	.11	1.08	1.98	.39	1.27	3.06	3.61	.89	.26	.32	.12	.04
IN.	.12	1.21	2.28	.45	1.37	3.53	4.03	1.03	.29	.37	.14	.04

CAL YR 1983 TOTAL 105442.8 MEAN 289 MAX 3360 MIN 7.1 CFSM .64 IN 8.66
WTR YR 1984 TOTAL 180931.0 MEAN 494 MAX 4420 MIN 7.1 CFSM 1.09 IN 14.86

03323500 WABASH RIVER AT HUNTINGTON, IN

LOCATION.--Lat 40°51'20", long 85°29'53", in SW¼NE¼ sec.27, T.28 N., R.9 E., Huntington County, Hydrologic Unit 05120101, on right bank at the Huntington Water and Light Plant, 2 miles south of Huntington, 2.4 miles downstream from Huntington Lake, 3.2 miles upstream from Little River, and at mile 409.0.

DRAINAGE AREA.--721 mi².

PERIOD OF RECORD.--January 1951 to current year.

REVISED RECORDS.--WSP 1909: 1959. WSP 2109: Drainage area.

GAGE.--None. Datum of gage was 700.04 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). July 5, 1951, to Sept. 30, 1974, water-stage recorder at site described in "LOCATION" paragraph. Prior to July 5, 1951, nonrecording gage at same site and datum.

REMARKS.--Flow regulated by Huntington Lake. Daily discharge computed from relation between discharge, head, and gate openings for Huntington Lake beginning Oct. 1, 1974.

COOPERATION.--Records of daily discharge furnished by Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--33 years, 605 ft³/s, 11.39 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,900 ft³/s Feb. 10, 1959; maximum gage height, 23.20 ft Feb. 10, 1959 (backwater from ice); minimum daily discharge, 2.4 ft³/s Oct. 28, 29, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 22.7 ft, from high-water mark by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 5,940 ft³/s Mar. 23; minimum daily discharge, 21 ft³/s Aug. 22-24, 28-31, Sept. 1, 2, 5-7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	85	2330	162	84	243	1260	589	523	83	61	21
2	54	101	2250	174	59	262	649	589	380	83	61	21
3	54	89	1480	206	122	204	494	548	315	71	49	62
4	53	72	876	231	409	188	464	501	252	61	66	40
5	53	72	948	239	1160	227	1320	47[illegible]	227	77	75	21
6	53	71	2250	229	1370	230	3570	470	201	84	75	21
7	54	71	3130	210	875	528	4740	422	201	291	75	21
8	53	70	3610	210	318	634	3750	358	173	795	75	25
9	133	70	3730	209	208	315	3780	338	126	405	57	46
10	52	79	1850	208	242	266	2550	370	126	164	27	75
11	52	155	943	192	1700	348	923	379	126	164	270	46
12	52	247	1490	171	2670	286	680	380	96	164	237	27
13	52	518	2600	147	2910	239	518	449	715	164	164	27
14	51	373	3550	140	3550	257	432	412	363	164	65	27
15	51	262	3780	170	3720	265	429	308	928	136	61	33
16	51	183	3640	172	3850	369	1440	209	542	98	61	43
17	51	51	3160	154	3300	1940	1890	209	349	83	61	80
18	51	58	1730	149	2040	4050	1960	187	205	83	86	111
19	71	62	534	150	1430	2600	2220	169	109	83	94	111
20	79	64	248	149	1070	1050	2340	279	85	83	80	85
21	79	342	254	124	723	3240	1870	956	85	82	33	76
22	79	809	445	128	492	5220	1880	1610	85	82	21	73
23	79	937	579	148	349	5940	2640	1680	485	82	21	73
24	295	993	250	167	252	5670	3560	1510	241	32	21	78
25	417	1150	137	166	214	3420	3420	1470	171	27	73	80
26	407	1510	213	132	269	3100	3660	1450	212	27	106	80
27	216	1430	219	105	349	4340	3340	919	211	27	42	87
28	86	1110	252	95	361	4240	1610	612	168	27	21	89
29	72	1600	266	176	259	4620	1090	821	136	51	21	89
30	99	2160	250	213	---	3900	650	1200	109	61	21	88
31	85	---	222	167	---	2190	---	998	---	61	21	---
TOTAL	3088	14794	47216	5293	34355	60381	59129	20863	7945	3895	2201	1756
MEAN	99.6	493	1523	171	1185	1948	1971	673	265	126	71.0	58.5
MAX	417	2160	3780	239	3850	5940	4740	1680	928	795	270	111
MIN	51	51	137	95	59	188	429	169	85	27	21	21
CFSM	.14	.68	2.11	.24	1.64	2.70	2.73	.93	.37	.18	.10	.08
IN.	.16	.76	2.44	.27	1.77	3.12	3.05	1.08	.41	.20	.11	.09

CAL YR 1983 TOTAL 170890 MEAN 468 MAX 3780 MIN 21 CFSM .65 IN 8.82
WTR YR 1984 TOTAL 260916 MEAN 713 MAX 5940 MIN 21 CFSM .99 IN 13.46

03324000 LITTLE RIVER NEAR HUNTINGTON, IN

LOCATION.--Lat 40°54'14", long 85°24'22", in NE¼NW¼ sec.9, T.28 N., R.10 E., Huntington County, Hydrologic Unit 05120101, on right bank on upstream side of highway bridge, 5 miles east of Huntington, and at mile 7.5.

DRAINAGE AREA.--263 mi².

PERIOD OF RECORD.--October 1943 to current year. Prior to January 1944 monthly discharge only, published in WSP 1305. Published as Little River at Huntington, January 1944 to September 1948, Little River near Huntington, October 1948 to September 1956, and Little Wabash River near Huntington, October 1956 to September 1961.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 728.10 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1948, nonrecording gage 4 miles downstream at datum 8.79 ft lower, and Oct. 1, 1948, to Sept. 5, 1950, nonrecording gage at present site and datum.

REMARKS.--Records good except those for winter period, which are fair. During periods of extreme high water in St. Marys River, some water leaves the St. Marys River basin through Junk ditch and flows into Little River basin via Graham McCulloch ditch.

AVERAGE DISCHARGE.--41 years, 227 ft³/s, 11.72 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,990 ft³/s Jan. 4, 1950; maximum gage height, 19.39 ft Mar. 14, 1982; minimum daily discharge, 1.1 ft³/s Oct. 8, 1946, site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 12	1300	3080	13.74	Mar. 17	0200	*3620	*15.00
Feb. 13	1200	3560	14.87	Mar. 21	0300	2840	13.13

Minimum daily discharge, 14 ft³/s Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	18	166	88	89	84	261	138	223	33	28	20
2	15	21	117	90	88	82	218	114	177	31	31	25
3	15	25	96	92	124	81	192	111	144	30	321	51
4	14	23	138	93	266	82	242	112	119	53	474	46
5	16	21	336	92	349	93	925	104	105	83	253	29
6	20	21	1740	91	248	100	1440	91	94	62	125	21
7	16	21	1680	88	179	92	652	84	84	46	78	21
8	15	19	675	85	140	88	376	83	77	36	60	23
9	16	25	372	82	125	86	294	80	71	30	56	25
10	17	25	276	81	120	85	236	80	63	29	44	76
11	17	54	666	78	1330	84	191	76	57	30	36	47
12	18	65	3020	74	2140	83	169	76	52	28	31	30
13	31	50	2610	74	3490	81	225	71	60	25	27	23
14	44	40	1470	75	3020	80	200	68	188	24	27	21
15	28	37	883	76	1840	90	217	62	140	23	25	20
16	21	157	482	75	1110	2270	541	58	80	23	24	19
17	18	160	300	73	848	3410	562	57	69	21	27	18
18	17	87	215	69	694	2180	535	56	60	23	45	18
19	17	66	170	65	642	1030	426	56	51	22	28	23
20	17	131	145	62	499	1880	321	1210	45	22	25	18
21	19	112	151	63	363	2670	250	2630	40	22	22	17
22	73	83	199	69	285	1780	827	1720	38	21	27	17
23	121	69	182	72	237	1110	1630	1200	61	20	34	17
24	66	163	152	79	201	1200	813	652	125	44	27	18
25	43	123	136	88	180	1610	458	380	116	243	23	23
26	31	81	121	94	157	2390	317	1870	66	103	22	31
27	24	68	116	98	125	1400	248	1060	52	140	21	27
28	22	1020	110	100	100	1150	200	564	43	100	21	22
29	18	761	101	97	86	720	160	759	40	70	21	18
30	17	295	96	95	---	443	166	455	36	41	20	18
31	18	---	91	92	---	325	---	301	---	31	19	---
TOTAL	839	3841	17012	2550	19075	26859	13292	14378	2576	1509	2022	782
MEAN	27.1	128	549	82.3	658	866	443	464	85.9	48.7	65.2	26.1
MAX	121	1020	3020	100	3490	3410	1630	2630	223	243	474	76
MIN	14	18	91	62	86	80	160	56	36	20	19	17
CFSM	.10	.49	2.09	.31	2.50	3.29	1.68	1.76	.33	.19	.25	.10
IN.	.12	.54	2.41	.36	2.70	3.80	1.88	2.03	.36	.21	29	.11

CAL YR 1983 TOTAL 76208 MEAN 209 MAX 3530 MIN 14 CFSM .80 IN 10.78
WTR YR 1984 TOTAL 104735 MEAN 286 MAX 3490 MIN 14 CFSM 1.09 IN 14.81

WABASH RIVER BASIN

03324200 SALAMONIE RIVER AT PORTLAND, IN

LOCATION.--Lat 40°25'40", long 85°02'20", in NE¼SE¼ sec.23, T.23 N., R.13 E., Jay County, Hydrologic Unit 05120102, on right bank at downstream side of county road bridge, 2.3 miles downstream from Butternut Creek, 3.2 miles west of Portland, 3.7 miles downstream from Little Salamonie River, and at mile 70.5.

DRAINAGE AREA.--85.6 mi².

PERIOD OF RECORD.--September 1959 to current year.

REVISED RECORDS.--WSP 2109: Drainage area. WDR IN-72-1: 1971.

GAGE.--Water-stage recorder. Datum of gage is 877.59 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 1, 1960, nonrecording gage at site 1.4 miles upstream at datum 6.43 ft higher.

REMARKS.--Records good except those for winter period, which are fair. Natural flow partially affected by sewage effluent.

AVERAGE DISCHARGE.--25 years, 73.5 ft³/s, 11.66 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,460 ft³/s Mar. 5, 1963, gage height, 16.96 ft; minimum daily, 0.4 ft³/s Sept. 27, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,400 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 16	1800	*2400	*13.76	Apr. 22	2300	2200	13.09
Apr. 5	2300	1780	11.62				

Minimum daily discharge, 1.3 ft³/s Oct. 2-4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	4.0	52	12	12	39	44	26	23	3.4	3.6	3.4
2	1.3	5.4	36	13	14	37	38	22	18	3.6	3.9	3.4
3	1.3	9.9	30	13	170	36	40	21	14	4.0	5.3	22
4	1.3	6.1	174	14	108	33	127	21	11	14	4.8	9.9
5	7.3	11	349	14	78	49	937	17	9.5	284	4.7	6.0
6	2.2	7.6	499	14	55	112	998	15	8.6	442	3.9	4.5
7	1.4	5.1	316	13	38	91	225	14	7.5	231	3.5	5.1
8	1.4	3.8	104	12	32	55	117	14	7.0	55	55	4.1
9	1.9	3.3	70	12	39	35	79	13	6.7	25	206	3.6
10	1.5	17	63	12	66	29	57	12	6.1	15	34	4.9
11	1.5	230	297	11	790	26	44	13	5.5	11	11	4.2
12	2.3	122	1020	11	442	23	36	26	5.4	8.6	6.4	4.3
13	17	39	294	11	431	21	41	20	5.8	6.9	4.7	3.7
14	4.2	22	168	11	259	23	38	15	10	5.6	4.5	3.3
15	2.3	102	150	11	155	63	65	12	6.9	5.1	3.9	3.2
16	1.9	487	73	11	121	1950	372	10	5.7	5.0	3.6	3.1
17	2.0	155	45	11	126	1040	945	9.0	5.0	4.6	9.8	2.9
18	4.2	71	31	10	130	230	339	8.5	5.9	4.7	41	3.2
19	3.8	44	24	8.8	133	136	177	8.5	6.0	4.5	12	3.2
20	7.9	38	22	7.6	98	513	143	16	4.7	4.3	6.1	3.3
21	6.1	51	25	5.8	68	655	91	27	4.3	4.6	4.7	3.5
22	39	36	49	6.2	50	327	1060	23	3.8	4.3	7.7	3.4
23	92	107	34	6.4	41	245	1100	234	4.4	4.2	6.6	4.4
24	42	317	23	6.7	37	243	395	85	23	4.4	5.2	4.5
25	17	104	19	7.2	124	429	165	38	12	4.7	4.6	4.8
26	7.3	52	18	9.3	84	494	103	41	6.8	5.8	4.1	7.4
27	4.7	52	16	23	51	218	69	25	6.4	8.3	3.6	4.5
28	3.3	809	15	18	43	182	51	48	4.9	4.8	3.3	4.4
29	3.3	254	14	15	40	116	39	137	5.1	4.1	3.5	3.8
30	3.1	97	13	14	---	76	37	59	3.9	3.8	3.3	3.7
31	4.7	---	12	13	---	56	---	34	---	4.1	3.4	---
TOTAL	290.7	3262.2	4055	358.0	3835	7582	7972	1064.0	246.9	1190.4	477.7	145.7
MEAN	9.38	109	131	11.5	132	245	266	34.3	8.23	38.4	15.4	4.86
MAX	92	809	1020	23	790	1950	1100	234	23	442	206	22
MIN	1.3	3.3	12	6.2	12	21	36	8.5	3.8	3.4	3.3	2.9
CFSM	.11	1.27	1.53	.13	1.54	2.86	3.11	.40	.10	.45	.18	.06
IN.	.13	1.42	1.76	.16	1.67	3.29	3.46	.46	.11	.52	.21	.06

CAL YR 1983 TOTAL 19951.0 MEAN 54.7 MAX 1550 MIN 1.0 CFSM .64 IN 8.67
WTR YR 1984 TOTAL 30479.6 MEAN 83.3 MAX 1950 MIN 1.3 CFSM .97 IN 13.25

03324300 SALAMONIE RIVER NEAR WARREN, IN

LOCATION.--Lat 40°42'45", long 85°27'13", in SE¼SE¼ sec.12, T.26 N., R.9 E., Huntington County, Hydrologic Unit 05120102, on right bank at downstream side of bridge on County Road 800 South, 0.4 mile downstream from Detamore ditch, 0.4 mile downstream from Interstate 69, 0.8 mile upstream from concrete and stone dam, 2.4 miles northwest of Warren, and at mile 30.0.

DRAINAGE AREA.--425 mi^2.

PERIOD OF RECORD.--March 1957 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder and concrete and stone control. Datum of gage is 784.65 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to July 28, 1960, nonrecording gage at same site and datum.

REMARKS.--Records good above 40 ft^3/s and poor below.

AVERAGE DISCHARGE.--27 years, 386 ft^3/s, 12.33 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,200 ft^3/s Feb. 10, 1959, gage height, 17.05 ft; minimum daily, 5.1 ft^3/s Jan. 2, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 12	1700	4720	11.23	Mar. 21	0600	3870	10.49
Feb. 12	1000	ice jam	*14.02	Mar. 26	0300	3360	10.04
Feb. 12	1700	*5120	11.57	Apr. 6	0700	3050	9.79
Mar. 16	2300	4960	11.43	Apr. 24	1400	3500	10.16

Minimum daily discharge, 10 ft^3/s Oct. 1, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	16	348	80	67	175	344	219	255	43	42	36
2	11	15	225	78	63	154	299	180	185	40	42	36
3	11	16	175	79	170	132	268	169	154	47	40	40
4	10	18	305	80	860	118	515	169	126	42	42	38
5	29	30	1310	82	540	154	1910	159	112	1110	60	82
6	33	35	2600	84	370	286	3020	144	103	1240	60	50
7	27	42	2400	80	280	317	2840	135	90	1460	60	45
8	23	42	969	75	240	286	1120	121	82	646	63	40
9	31	48	489	71	190	243	597	112	74	268	422	50
10	29	60	363	68	300	174	429	108	70	159	547	56
11	26	245	1080	67	2200	127	331	103	70	144	175	60
12	23	597	4440	67	4120	94	274	159	78	149	90	56
13	43	343	3890	63	3820	99	274	243	130	78	56	49
14	48	179	2110	57	2380	164	286	180	351	66	52	43
15	61	133	1290	56	1330	175	900	135	154	60	48	40
16	71	567	755	54	934	3820	1460	117	94	58	44	40
17	52	850	467	52	795	4530	1760	103	70	56	42	40
18	41	357	308	50	771	4130	1930	90	63	54	86	40
19	33	208	225	48	718	2190	1050	86	53	54	351	40
20	57	157	196	45	625	2150	703	407	50	52	126	40
21	86	139	175	40	467	3710	539	667	50	51	63	40
22	168	137	365	41	358	3230	1080	483	60	50	47	47
23	178	136	272	42	292	1840	2850	573	126	50	40	53
24	122	567	204	44	255	1640	3390	771	191	52	50	53
25	86	632	158	47	318	2100	2010	379	429	56	36	67
26	48	281	134	51	523	3060	755	733	159	60	36	70
27	28	193	122	65	310	1870	523	475	90	63	36	60
28	23	1470	110	93	235	1150	379	344	94	60	36	56
29	18	2000	99	90	200	851	292	960	74	60	36	49
30	16	762	91	82	---	590	255	667	42	45	36	46
31	17	---	84	74	---	429	---	371	---	40	36	---
TOTAL	1459	10275	25759	2005	23731	39988	32383	9562	3679	6413	2900	1462
MEAN	47.1	343	831	64.7	818	1290	1079	308	123	207	93.5	48.7
MAX	178	2000	4440	93	4120	4530	3390	960	429	1460	547	82
MIN	10	15	84	40	63	94	255	86	42	40	36	36
CFSM	.11	.81	1.96	.15	1.93	3.04	2.54	.73	.29	.49	.22	.12
IN.	.13	.90	2.25	.18	2.08	3.50	2.83	.84	.32	.56	.25	.13

CAL YR 1983 TOTAL 100096.6 MEAN 274 MAX 4670 MIN 9.5 CFSM .65 IN 8.76
WTR YR 1984 TOTAL 159616.0 MEAN 436 MAX 4530 MIN 10 CFSM 1.03 IN 13.97

03324500 SALAMONIE RIVER AT DORA, IN

LOCATION.--Lat 40°48'42", long 85°41'02", in NE¼NE¼ sec.12, T.27 N., R.7 E., Wabash County, Hydrologic Unit 05120102, on right bank, 0.4 mile downstream from Salamonie Lake, 1.5 miles northwest of Dora, and 3.0 miles upstream from mouth.

DRAINAGE AREA.--557 mi².

PERIOD OF RECORD.--November 1923 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1931(M), 1932, 1933(M), 1935-36(M), 1938-40(M), 1941-42, 1945, 1952. WSP 1335: 1934(M). WSP 1555: 1952, 1955-56(M), 1957. WSP 2109: Drainage area.

GAGE.--None. Datum of gage was 673.96 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Oct. 9, 1961, to Sept. 30, 1974, water-stage recorder at site described in "LOCATION" paragraph. Prior to Oct. 1, 1951, nonrecording gage at site 1.5 miles upstream at datum 688.59 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers) and Oct. 1, 1951, to Oct. 8, 1961, water-stage recorder located on left bank 2,000 ft upstream at datum 679.77 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Flow regulated by Salamonie Lake. Daily discharge computed from relation between discharge, head, and gate openings for Salamonie Lake beginning Oct. 1, 1974.

COOPERATION.-Records of daily discharge furnished by Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--60 years (1924 to current year), 512 ft³/s, 12.48 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft³/s May 18, 1943, gage height, 14.75 ft, from graph based on gage readings, site and datum then in use; minimum daily, 0.70 ft³/s Oct. 30, 1968, result of abnormal regulation.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 5,450 ft³/s Apr. 2; minimum daily, 22 ft³/s Nov. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	341	293	1490	132	120	223	5250	204	433	48	48	26
2	340	292	1430	118	102	275	5450	178	347	48	48	26
3	356	254	1260	150	144	292	3640	201	216	48	48	26
4	362	313	766	175	411	271	1410	201	151	48	48	26
5	389	322	668	152	961	239	54	201	151	298	79	26
6	401	321	1500	104	972	257	26	201	151	633	95	26
7	399	121	2030	104	631	354	1160	181	151	1450	95	26
8	398	22	2330	104	292	398	2930	157	151	1640	95	26
9	396	270	2430	104	201	231	4020	139	151	1000	70	26
10	448	385	1100	104	318	173	4500	114	101	400	314	26
11	472	383	492	70	849	284	4980	114	70	290	872	56
12	154	407	604	78	1360	272	3920	114	70	175	524	40
13	389	441	686	90	629	214	1830	161	70	95	116	26
14	610	593	733	90	221	214	586	195	143	48	48	26
15	606	662	1150	90	906	216	804	195	280	48	38	26
16	601	437	1840	101	1610	238	1460	195	357	33	26	26
17	196	42	2080	113	2550	268	1820	195	313	26	26	26
18	24	42	2020	113	2910	285	1550	195	133	26	26	26
19	305	42	2290	112	2830	141	1150	195	70	26	124	26
20	594	42	2430	112	3140	173	788	195	70	26	182	26
21	590	424	2300	112	3230	182	539	198	70	26	182	26
22	588	1010	1900	89	3040	185	365	199	55	26	182	26
23	586	984	1120	71	2430	121	280	646	48	26	72	245
24	583	965	238	71	1230	49	724	1690	48	26	26	358
25	579	985	28	71	465	49	1020	1950	318	26	26	296
26	574	994	78	71	481	50	1170	153	485	26	26	359
27	468	975	131	99	546	50	1480	720	175	26	26	358
28	408	968	252	112	457	1550	1850	1820	48	26	26	400
29	334	1300	346	113	183	2510	1020	2200	48	32	26	423
30	296	1540	317	141	---	3000	365	2180	48	48	26	354
31	294	---	204	186	---	4270	---	1200	---	48	26	---
TOTAL	13081	15829	36243	3352	33218	17034	56141	16487	4922	6742	3566	3409
MEAN	422	528	1169	108	1145	549	1871	532	164	217	115	114
MAX	610	1540	2430	186	3230	4270	5450	2200	485	1640	872	423
MIN	24	22	28	70	102	49	26	114	48	26	26	26
CPSM	.76	.95	2.10	.19	2.06	.99	3.36	.96	.29	.39	.21	.21
IN.	.87	1.06	2.42	.22	2.22	1.14	3.75	1.10	.33	.45	.24	.23

CAL YR 1983 TOTAL 155260 MEAN 425 MAX 2960 MIN 13 CPSM .76 IN 10.37
WTR YR 1984 TOTAL 210024 MEAN 574 MAX 5450 MIN 22 CPSM 1.03 IN 14.03

03325000 WABASH RIVER AT WABASH, IN

LOCATION.--Lat 40°47'25", long 85°49'13", in SE¼NW¼ sec.14, T.27 N., R.6 E., Wabash County, Hydrologic Unit 05120101, on right bank on upstream side of Wabash Street bridge in Wabash, 7.1 miles downstream from Salamonie River, and at mile 387.2.

DRAINAGE AREA.--1,768 mi^2.

PERIOD OF RECORD.--August 1923 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1931-37(M), 1938-39, 1940(M). WSP 1385: 1942. WSP 1505: 1955. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 642.66 ft National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1954, nonrecording gage at same site and datum.

REMARKS.--Records good through April and fair thereafter while bridge was under construction. Flow regulated by Huntington Lake and Salamonie Lake.

AVERAGE DISCHARGE.--61 years, 1,496 ft^3/s, 11.49 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 49,600 ft^3/s May 18, 1943; maximum gage height, 24.44 ft Feb. 11, 1959 (ice jam); minimum daily discharge, 19 ft^3/s July 21, 1936.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 28.7 ft Mar. 26, 1913, from floodmark, determined by Corps of Engineers, discharge, 90,000 ft^3/s, from rating curve extended above 49,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximun discharge, 11,500 ft^3/s Feb. 13, gage height, 14.70 ft; minimum daily, 67 ft^3/s Aug. 31.

REVISIONS.--The maximum discharge for the water year 1983 has been revised to 12,900 ft^3/s May 2, 1983 and, revised daily discharges, in cubic feet per second, for the high-water period, area given below. These figures supersede those published in the report for 1983.

May 1, 1983....4000
2 10,400
3 6,440

May 1983	TOTAL	98496
	MEAN	3177
	MAX	10400
	MIN	582
	CFSM	1.80
	IN.	2.06

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	405	452	4120	510	460	660	6210	1030	1460	232	159	71
2	405	488	3950	460	330	776	5870	981	1070	202	163	71
3	333	500	3520	470	509	780	4650	965	912	202	226	78
4	157	488	2310	530	1210	685	2500	934	668	200	782	121
5	444	471	2010	560	2700	669	2020	887	618	320	544	136
6	471	484	5550	510	2730	763	4300	867	544	711	400	96
7	459	372	8280	470	2150	892	5620	802	516	1570	299	84
8	463	137	6670	455	1370	1300	6430	714	501	2650	265	77
9	463	235	6970	450	645	934	6900	626	452	1930	246	91
10	484	533	4620	445	718	591	7220	621	392	593	291	129
11	585	630	2990	415	2680	819	5760	644	336	533	572	203
12	420	811	7830	380	8640	899	4870	642	327	392	568	179
13	186	1120	6820	365	10900	667	2940	701	282	320	495	108
14	713	1340	6350	355	8170	694	1600	742	411	249	201	94
15	690	1240	6110	360	7160	955	1910	629	666	242	148	88
16	657	1060	5980	380	6720	9050	2940	550	773	214	119	82
17	563	512	5770	390	6730	6330	4380	510	752	167	110	90
18	105	319	4530	380	5960	6680	3870	493	588	150	147	123
19	232	273	3270	375	4980	7260	3740	463	341	147	217	164
20	757	272	3080	375	4690	8670	3320	3300	269	145	280	169
21	821	455	2910	360	4510	6610	2790	4000	246	147	260	147
22	909	1870	2800	340	4080	7680	2980	4860	242	145	226	129
23	888	2020	2340	335	3400	7690	4910	4520	286	143	172	232
24	1010	2230	1250	350	2250	7820	4710	4130	400	127	86	423
25	1310	2290	540	370	1170	8170	5000	3920	477	176	218	434
26	1190	2470	480	365	1060	6530	4450	3940	753	327	147	451
27	893	2730	510	360	1290	7040	5250	4970	578	280	158	459
28	676	3760	610	360	1420	6800	3650	3470	352	268	114	548
29	533	3920	730	395	767	7530	3150	3150	295	443	72	665
30	452	4070	750	460	---	7450	1550	3630	268	199	70	671
31	444	---	640	485	---	6330	---	2860	---	176	67	---
TOTAL	18118	37552	114290	12815	99399	129724	125490	60551	15775	13600	7822	6413
MEAN	584	1252	3687	413	3428	4185	4183	1953	526	439	252	214
MAX	1310	4070	8280	560	10900	9050	7220	4970	1460	2650	782	671
MIN	105	137	480	335	330	591	1550	463	242	127	67	71
CFSM	.33	.71	2.09	.23	1.94	2.37	2.37	1.11	.30	.25	.14	.12
IN.	.38	.79	2.40	.27	2.09	2.73	2.64	1.27	.33	.29	.16	.13

CAL YR 1983 TOTAL 484348 MEAN 1327 MAX 8280 MIN 50 CFSM .75 IN 10.19
WTR YR 1984 TOTAL 641549 MEAN 1753 MAX 10900 MIN 67 CFSM .99 IN 13.50

03325311 LITTLE MISSISSINEWA RIVER AT UNION CITY, IN

LOCATION.--Lat 40°11'46", long 84°49'45", in SE¼NW¼ sec.26, T.18 N., R.1 W., Randolph County, Hydrologic Unit 05120103, on right bank, 85 ft downstream from Westinghouse Road, 0.5 mile downstream from Little ditch, 0.8 mile upstream from City Drain, and 1.2 miles west of the Post Office in Union City.

DRAINAGE AREA.--9.67 mi².

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1075.50 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 128 ft³/s Apr. 22, 1984 gage height, 6.31 ft; no flow at times for most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 140 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 22	1345	*128	*6.31

No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.16	5.2	1.5	1.6	4.0	7.4	7.6	3.0	.69	.09	.00
2	.00	.26	4.0	1.4	2.4	3.6	6.1	4.4	2.9	.62	.09	.00
3	.00	.76	2.8	1.4	41	3.1	6.6	3.6	2.6	.56	.09	.02
4	.00	3.5	17	1.5	18	3.2	13	3.4	2.3	2.0	1.1	.02
5	.08	2.0	25	1.5	9.3	5.6	69	2.7	2.3	27	2.6	.00
6	.00	.92	47	1.6	4.2	12	76	2.7	2.0	20	.62	.00
7	.00	.76	27	1.4	2.7	9.3	48	2.7	1.9	6.6	.30	.00
8	.00	.68	12	1.3	2.4	7.1	31	2.6	1.7	3.6	.35	.00
9	.00	.61	7.8	1.2	3.0	5.2	17	2.4	1.5	2.6	2.4	.02
10	.00	1.5	6.3	1.2	16	3.8	10	2.1	1.4	2.0	1.2	.16
11	.00	23	46	1.1	40	2.7	7.6	2.3	1.2	1.6	22	.09
12	.00	9.6	67	1.1	37	2.4	6.6	2.4	1.1	1.2	6.1	.02
13	.33	4.3	45	1.1	39	2.6	6.3	2.3	1.1	.92	2.1	.00
14	.52	2.4	35	1.1	29	2.4	7.9	1.9	1.1	.76	.83	.00
15	.16	14	30	1.1	17	29	14	1.7	.92	.69	.39	.02
16	.05	18	17	1.1	13	96	47	1.5	.92	.69	.23	.00
17	.01	6.5	11	1.1	11	62	54	1.4	.92	.56	.16	.00
18	.42	3.4	6.9	1.1	10	38	40	1.4	1.0	.56	.26	.00
19	.66	2.2	5.6	.92	11	24	27	1.5	.83	.39	.23	.00
20	1.3	2.7	4.9	.75	6.6	54	20	7.6	.76	.39	.11	.00
21	2.2	3.3	4.6	.61	4.6	59	13	36	.76	.44	.05	.00
22	8.5	2.0	6.6	.62	3.4	42	77	20	.69	.26	.26	.00
23	6.3	18	3.6	.68	2.8	33	96	37	2.0	.23	.14	.00
24	2.4	24	2.3	.74	2.7	28	77	20	33	.23	.07	.00
25	1.0	9.3	2.0	.80	4.6	50	50	13	8.2	.30	.03	.19
26	.76	4.8	2.1	2.0	8.8	49	34	7.6	2.9	.35	.02	.62
27	.50	7.0	2.5	13	5.9	33	21	5.6	1.9	.39	.00	.26
28	.35	53	2.3	4.2	4.0	26	12	5.6	1.2	.23	.00	.11
29	.39	24	2.0	2.4	3.4	18	8.7	4.6	.83	.16	.02	.05
30	.26	9.4	1.7	1.7	---	12	10	4.0	.76	.14	.00	.03
31	.16	---	1.6	1.7	---	9.0	---	3.4	---	.11	.00	---
TOTAL	26.35	252.05	453.8	52.92	354.4	729.0	913.2	215.0	83.69	76.27	41.84	1.61
MEAN	.85	8.40	14.6	1.71	12.2	23.5	30.4	6.94	2.79	2.46	1.35	.054
MAX	8.5	53	67	13	41	96	96	37	33	27	22	.62
MIN	.00	.16	1.6	.61	1.6	2.4	6.1	1.4	.69	.11	.00	.00
CFSM	.09	.87	1.51	.18	1.26	2.43	3.14	.72	.29	.25	.14	.006
IN.	.10	.97	1.75	.20	1.36	2.80	3.51	.83	.32	.29	.16	.01

CAL YR 1983 TOTAL 2205.10 MEAN 6.04 MAX 79 MIN .00 CFSM .63 IN 8.48
WTR YR 1984 TOTAL 3200.13 MEAN 8.74 MAX 96 MIN .00 CFSM .90 IN 12.31

03325500 MISSISSINEWA RIVER NEAR RIDGEVILLE, IN

LOCATION.--Lat 40°16'49", long 84°59'44", in SE¼SE¼ sec.7, T.21 N., R.14 E., Randolph County, Hydrologic Unit 05120103, on right bank 30 ft downstream from highway bridge, 0.8 mile downstream from Mud Creek, 2 miles east of Ridgeville, and at mile 99.5.

DRAINAGE AREA.--133 mi².

PERIOD OF RECORD.--August 1946 to current year.

REVISED RECORDS.--WSP 1235: 1948. WSP 1335: 1953. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 965.28 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 5, 1950, nonrecording gage at same site and datum.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--38 years, 126 ft³/s, 12.87 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,900 ft³/s June 10, 1958, gage height, 16.25 ft, from rating curve extended above 5,000 ft³/s on basis of contracted-opening measurement of peak flow; minimum daily, 0.1 ft³/s Oct. 24, 1946.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2270 ft³/s April 23, gage height 10.97 ft (No peak discharge above base of 2,400 ft³/s); minimum daily, 1.4 ft³/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	6.4	133	26	14	70	142	117	42	17	5.3	2.7
2	1.5	8.0	110	25	15	62	124	104	34	16	5.6	2.7
3	1.4	16	91	26	108	54	118	103	27	22	5.6	7.3
4	1.5	85	352	27	268	52	194	106	27	27	15	8.0
5	4.3	47	517	29	190	92	574	86	27	863	15	6.7
6	2.9	21	867	29	121	167	1230	82	31	748	8.7	6.4
7	1.9	15	419	24	53	139	454	81	28	238	5.6	5.8
8	1.9	15	218	20	25	104	288	81	27	51	6.7	6.1
9	1.9	15	169	17	31	81	210	76	27	25	17	5.6
10	2.0	16	154	14	233	61	170	67	25	21	11	9.4
11	1.9	311	731	12	631	51	142	69	25	19	17	8.3
12	2.0	189	1410	12	490	38	124	114	25	17	16	7.0
13	5.8	99	510	12	557	31	130	98	24	16	10	6.4
14	5.6	58	305	12	343	31	134	83	25	16	6.1	6.7
15	3.5	175	270	11	239	89	229	69	24	15	4.3	7.3
16	2.9	427	174	11	208	1260	438	61	22	15	3.5	6.7
17	2.7	171	132	11	202	1270	772	56	22	14	3.1	5.0
18	3.7	94	112	11	194	481	545	54	21	14	20	4.3
19	5.3	59	86	11	200	350	317	53	20	14	7.7	5.0
20	6.4	68	70	9.8	161	582	271	66	19	12	4.8	4.5
21	14	110	67	8.8	132	969	218	270	19	14	3.5	4.1
22	175	60	96	9.0	112	574	742	198	18	11	4.5	4.1
23	256	155	56	9.8	102	434	1530	565	25	8.3	9.0	4.5
24	65	268	49	13	94	421	784	172	292	8.0	5.8	7.0
25	13	115	42	21	164	452	347	106	99	11	3.7	8.3
L26	8.0	62	37	46	208	602	248	86	34	11	3.3	15
27	5.3	61	33	100	154	393	194	63	25	12	2.5	11
28	4.8	741	31	69	104	343	158	66	23	9.4	2.3	9.4
29	5.3	314	29	37	84	245	134	99	20	7.0	3.7	8.7
30	6.4	187	28	20	---	193	140	69	19	5.6	3.1	8.3
31	6.4	---	26	15	---	162	---	53	---	5.3	2.9	---
TOTAL	619.8	3968.4	7324	698.4	5437	9853	11101	3373	1096	2282.6	232.3	202.3
MEAN	20.0	132	236	22.5	187	318	370	109	36.5	73.6	7.49	6.74
MAX	256	741	1410	100	631	1270	1530	565	292	863	20	15
MIN	1.4	6.4	26	8.8	14	31	118	53	18	5.3	2.3	2.7
CFSM	.15	.99	1.77	.17	1.41	2.39	2.78	.82	.27	.55	.06	.05
IN.	.17	1.11	2.05	.20	1.52	2.76	3.10	.94	.31	.64	.06	.06

CAL YR 1983 TOTAL 35811.3 MEAN 98.1 MAX 1840 MIN 1.1 CFSM .74 IN 10.02
WTR YR 1984 TOTAL 46187.8 MEAN 126 MAX 1530 MIN 1.4 CFSM .95 IN 12.92

03326070 BIG LICK CREEK NEAR HARTFORD CITY, IN

LOCATION.--Lat 40°25'20", long 85°21'04", in SE¼SE¼ sec.23, T.23 N., R.10 E., Blackford County, Hydrologic Unit 05120103, on right bank 6 ft downstream from bridge on County Road 100 East, and 2.0 miles southeast of Hartford City.

DRAINAGE AREA.--29.2 mi².

PERIOD OF RECORD.--July 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 865.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--13 years, 27.8 ft³/s, 12.93 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1940 ft³/s June 6, 1981, gage height, 16.14 ft; minimum daily, 0.19 ft³/s Oct. 4, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 450 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 12	0200	539	11.44	Mar. 20	1700	582	11.80
Feb. 11	0100	452	10.63	Apr. 22	2200	469	10.80
Mar. 16	0800	*746	*12.80				

Minimum daily discharge, 0.19 ft³/s Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.32	3.4	13	6.2	4.7	9.7	20	13	12	3.8	2.2	1.8
2	.28	4.5	10	6.1	5.5	8.8	17	12	9.3	3.4	2.3	1.7
3	.23	9.3	8.7	6.2	198	8.5	22	12	7.4	3.2	2.5	4.7
4	.19	7.2	114	6.3	109	9.6	75	11	6.5	7.7	2.6	3.6
5	1.8	4.5	157	6.3	60	14	244	9.8	5.8	43	2.9	1.9
6	2.6	3.4	210	6.0	25	29	170	9.4	5.6	111	2.3	1.7
7	.33	2.9	109	5.3	14	23	70	9.0	4.9	58	2.3	1.7
8	.23	2.8	36	4.8	10	18	41	8.7	4.9	16	14	1.8
9	.38	4.1	23	4.5	17	14	28	8.2	4.5	8.2	23	2.0
10	.63	4.7	20	4.6	158	10	21	7.6	4.3	6.7	6.5	2.9
11	.87	65	205	4.3	295	8.1	17	8.4	3.9	9.6	3.1	2.6
12	1.1	19	398	4.2	199	7.2	15	31	3.9	5.1	2.3	2.1
13	6.0	7.7	152	4.3	186	6.8	18	17	4.3	3.9	2.1	2.0
14	4.7	5.2	103	4.3	111	6.4	18	12	12	3.4	2.1	1.9
15	1.1	8.8	84	4.2	68	28	56	9.3	5.8	3.2	1.9	2.2
16	.63	65	40	4.2	49	605	121	7.9	4.7	3.1	1.8	2.2
17	.79	20	25	4.2	54	260	143	8.0	4.3	3.1	4.9	2.1
18	1.8	10	18	3.8	52	118	87	6.9	3.8	3.2	49	2.0
19	6.7	7.0	12	3.1	45	79	49	6.8	3.6	2.9	10	2.0
20	6.2	6.7	10	2.1	28	349	32	9.3	3.4	2.9	4.7	1.7
21	13	9.5	9.2	1.6	20	261	24	22	3.2	3.1	2.9	1.6
22	13	6.7	23	1.5	16	131	222	13	3.2	2.6	3.1	1.6
23	6.5	36	16	1.6	14	128	252	43	13	2.5	4.5	2.4
24	2.1	81	13	2.5	12	124	120	19	115	2.6	2.5	3.7
25	2.2	22	9.9	5.2	32	241	66	12	25	3.1	2.2	2.7
26	2.1	12	9.3	8.2	22	162	44	19	9.6	3.4	1.9	4.4
27	2.2	13	8.6	13	16	93	28	12	7.7	4.9	1.8	2.9
28	2.2	210	7.9	10	13	75	21	54	6.0	3.1	1.9	2.3
29	2.9	80	7.4	6.9	11	50	17	94	4.5	2.5	1.8	2.4
30	2.9	25	6.9	5.5	---	33	17	32	4.1	2.2	1.8	2.1
31	3.4	---	6.4	5.2	---	24	---	18	---	2.3	1.7	---
TOTAL	89.38	756.4	1865.3	156.2	1844.2	2934.1	2075	555.3	306.2	333.7	168.6	70.7
MEAN	2.88	25.2	60.2	5.04	63.6	94.6	69.2	17.9	10.2	10.8	5.44	2.36
MAX	13	210	398	13	295	605	252	94	115	111	49	4.7
MIN	.19	2.8	6.4	1.5	4.7	6.4	15	6.8	3.2	2.2	1.7	1.6
CFSM	.10	.86	2.06	.17	2.18	3.24	2.37	.61	.35	.37	.19	.08
IN.	.11	.96	2.38	.20	2.35	3.74	2.64	.71	.39	.43	.21	.09

CAL YR 1983 TOTAL 6578.89 MEAN 18.0 MAX 398 MIN .19 CFSM .62 IN 8.38
WTR YR 1984 TOTAL 11155.08 MEAN 30.5 MAX 605 MIN .19 CFSM 1.05 IN 14.21

03326500 MISSISSINEWA RIVER AT MARION, IN

LOCATION.--Lat 40°34'34", long 85°39'34", in SE¼NE¼ sec.31, T.25 N., R.8 E., Grant County, Hydrologic Unit 05120103, on left bank 12 ft downstream from Highland Avenue bridge in Marion, 0.1 mile downstream from old mill dam, 1.0 mile upstream from Hummel Creek, 4.6 miles downstream from Lugar Creek, and at mile 35.8.

DRAINAGE AREA.--682 mi².

PERIOD OF RECORD.--September 1923 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1927(M). WSP 1385: 1948. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 774.56 ft National Geodetic Vertical Datum of 1929. Prior to Dec. 9, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow periodically regulated by dam above station.

AVERAGE DISCHARGE.--61 years, 627 ft³/s, 12.48 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s Mar. 21, 1927, gage height, 17.40 ft from graph based on gage readings, from rating curve extended above 18,000 ft³/s; minimum daily, 3.4 ft³/s Oct. 25, 1968.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 19.20 ft from information by State of Indiana, Department of Natural Resources.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 5,600 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 7	0500	6750	8.30	Mar. 17	2300	*7970	*9.19
Dec. 12	1200	7070	8.54	Mar. 21	0700	5870	7.60
Feb. 11	2200	5980	7.70	Apr. 24	0600	6270	7.93

Minimum daily discharge, 22 ft³/s Aug. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	68	834	160	125	386	713	473	468	109	86	60
2	35	72	535	160	125	395	607	414	381	108	83	60
3	34	70	414	170	250	363	573	377	327	112	43	77
4	37	68	584	180	1790	332	849	377	287	311	22	64
5	78	70	1680	180	1870	350	2180	354	260	757	48	68
6	51	68	3490	170	986	453	3840	328	348	1310	90	230
7	43	92	3250	160	535	671	3870	303	227	2660	90	66
8	43	90	2260	150	354	601	1830	291	210	1370	103	60
9	44	81	1140	150	337	448	1110	279	196	601	155	83
10	44	104	782	140	642	386	821	271	182	367	172	66
11	50	607	1550	140	3900	320	647	151	178	271	105	72
12	51	821	6520	135	5180	280	557	386	165	228	88	66
13	105	671	5720	132	4280	260	546	458	174	190	83	58
14	70	350	3620	130	3060	260	509	414	172	164	77	55
15	67	271	2260	130	2100	363	677	332	176	144	81	55
16	61	409	1550	130	1470	5690	1490	299	157	132	77	55
17	60	1510	986	125	1250	7760	2530	275	150	122	74	55
18	70	957	695	120	1190	6440	3300	263	144	117	68	53
19	64	509	458	120	1130	2540	2120	259	136	113	102	51
20	128	363	370	120	1040	3710	1360	414	128	109	95	49
21	89	301	310	120	821	5710	1100	551	123	110	92	48
22	320	284	275	120	647	4480	1270	630	54	106	125	46
23	216	312	240	120	541	2910	5060	770	46	100	90	51
24	493	726	220	120	473	2770	5560	1440	343	106	83	53
25	350	1360	205	120	573	3560	2700	964	433	103	77	62
26	219	751	195	130	744	4810	1520	848	395	138	68	62
27	151	509	190	145	848	3130	1060	630	233	119	64	58
28	110	1500	185	170	624	2030	802	579	183	120	64	60
29	92	2520	180	240	448	1550	636	1120	76	103	64	68
30	81	1950	170	190	---	1150	546	936	61	93	60	77
31	76	---	165	140	---	875	---	618	---	88	57	---
TOTAL	3371	17464	41033	4517	37333	64983	50382	15804	6413	10481	2586	1988
MEAN	109	582	1324	146	1287	2096	1679	510	214	338	83.4	66.3
MAX	493	2520	6520	240	5180	7760	5560	1440	468	2660	172	230
MIN	34	68	165	120	125	260	509	151	46	88	22	46
CFSM	.16	.85	1.94	.21	1.89	3.07	2.46	.75	.31	.50	.12	.10
IN.	.18	.95	2.24	.25	2.04	3.54	2.75	.86	.35	.57	.14	.11

CAL YR 1983 TOTAL 172789 MEAN 473 MAX 6520 MIN 34 CFSM .69 IN 9.42
WTR YR 1984 TOTAL 256355 MEAN 700 MAX 7760 MIN 22 CFSM 1.03 IN 13.98

03327000 MISSISSINEWA RIVER AT PEORIA, IN

LOCATION.--Lat 40°43'24", long 85°57'27", in SW¼SW¼ sec.3, T.26 N., R.5 E., Miami County, Hydrologic Unit 05120103, on right bank at Peoria, 0.6 mile downstream from Mississinewa Lake, 6.5 miles southeast of Peru, and 6.7 miles upstream from mouth.

DRAINAGE AREA.--808 mi².

PERIOD OF RECORD.--October 1952 to current year.

REVISED RECORDS.--WSP 1335: 1953. WSP 2109: Drainage area.

GAGE.--None. Datum of gage was 660.00 ft National Geodetic Vertical Datum of 1929. Oct. 1, 1962, to Sept. 30, 1974, water-stage recorder at site described in "LOCATION" paragraph. Prior to Oct. 7, 1954, nonrecording gage and crest-stage gage on highway bridge 2,500 ft upstream, and Oct. 7, 1954, to Sept. 30, 1962, water-stage recorder on right bank at site 2,500 ft upstream at same datum.

REMARKS.--Flow regulated by Mississinewa Lake (See sta. 03326950). Daily discharge computed from relation between discharge, head, and gate openings for Mississinewa Lake beginning Oct. 1, 1974.

COOPERATION.--Records of daily discharge furnished by Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--32 years, 713 ft³/s, 11.99 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,000 ft³/s June 11, 1958, gage height, 19.26 ft, site then in use; minimum daily, 6.1 ft³/s Oct. 3, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 5,370 ft³/s Apr. 8; minimum daily, 24 ft³/s Oct. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	663	2190	210	308	522	4510	382	506	47	131	68
2	109	661	1490	162	143	437	4450	425	447	47	110	68
3	109	659	804	268	169	361	3330	487	447	61	110	68
4	109	656	578	361	621	412	2890	551	309	68	110	80
5	154	654	580	286	1290	442	3560	564	275	470	86	89
6	169	549	1610	237	1530	442	4400	433	234	956	51	89
7	152	327	2700	219	1300	443	5310	349	246	2220	26	99
8	152	112	2710	219	807	617	5370	249	284	1710	82	110
9	152	494	2690	219	510	759	3840	204	283	583	110	110
10	152	761	2660	219	415	625	1710	225	1000	372	110	135
11	152	758	1960	180	424	441	1030	256	557	288	140	172
12	103	1160	679	161	454	441	822	276	154	226	154	193
13	266	1360	351	161	477	263	822	394	154	181	154	193
14	505	1350	768	161	488	284	821	485	176	153	154	193
15	504	936	1300	161	877	393	820	512	265	139	128	172
16	502	771	1810	161	2110	430	822	378	298	139	101	104
17	311	1130	2470	161	3200	466	827	280	298	120	89	68
18	24	1180	3170	161	3460	872	1150	240	297	87	89	74
19	373	996	3800	161	3430	1500	1510	240	297	85	89	57
20	625	992	4020	161	3830	1800	1270	338	193	107	77	39
21	623	1110	3920	161	4050	1840	872	581	106	107	68	29
22	779	1300	3040	141	4720	1880	765	828	108	107	68	34
23	888	1110	1680	132	4310	1920	773	1280	71	84	68	34
24	970	966	767	132	2080	1910	1210	1970	47	57	68	34
25	915	1310	383	132	940	1380	1890	1610	188	36	68	34
26	722	1550	442	132	866	1160	2420	918	429	58	68	72
27	1080	1430	442	133	792	1530	2560	1320	512	223	68	132
28	1070	1260	362	150	818	1930	1940	1340	319	262	68	132
29	786	1600	338	162	624	3850	1510	1000	181	227	68	132
30	667	2040	323	243	---	4620	792	915	96	172	68	132
31	665	---	277	308	---	4570	---	776	---	154	68	---
TOTAL	13897	29845	50314	5855	45043	38540	63996	19806	8777	9546	2849	2946
MEAN	448	995	1623	189	1553	1243	2133	639	293	308	91.9	98.2
MAX	1080	2040	4020	361	4720	4620	5370	1970	1000	2220	154	193
MIN	24	112	277	132	143	263	765	204	47	36	26	29
CFSM	.55	1.23	2.01	.23	1.92	1.54	2.64	.79	.36	.38	.11	.12
IN.	.64	1.37	2.32	.27	2.07	1.77	2.95	.91	.40	.44	.13	.14

CAL YR 1983 TOTAL 212533 MEAN 582 MAX 4020 MIN 19 CFSM .72 IN 9.78
WTR YR 1984 TOTAL 291414 MEAN 796 MAX 5370 MIN 24 CFSM .99 IN 13.42

03327500 WABASH RIVER AT PERU, IN

LOCATION.--Lat 40°44'35", long 86°05'45", in SE¼NE¼ sec.32, T.27 N., R.4 E., Miami County, Hydrologic Unit 05120101, on right bank at upstream side of bridge on U.S. Highway 31, 0.5 mile southwest of Peru, 4.4 miles downstream from Mississinewa River, and at mile 370.5.

DRAINAGE AREA.--2,686 mi².

PERIOD OF RECORD.--August 1943 to current year.

REVISED RECORDS.--WSP 2109: Drainage area. WDR IN-74-1: 1973. WDR IN-81-1: 1979.

GAGE.--Water-stage recorder. Datum of gage is 617.94 ft National Geodetic Vertical Datum of 1929 (levels by [illegible] of Engineers). Prior to June 20, 1961, nonrecording gage at same site and datum.

REMARKS.--Records fair. Flow regulated by Huntington Lake, Salamonie Lake, and Mississinewa Lake.

AVERAGE DISCHARGE.--41 years, 2,367 ft³/s, 11.97 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 68,000 ft³/s May 18, 1943, gage height, 24.46 ft, from floodmark; minimum daily, 72 ft³/s Oct. 5, 1946.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 28.1 ft, discharge, 115,000 ft³/s, from rating curve extended above 63,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,400 ft³/s Feb.13, gage height, 11.19 ft; minimum daily, 184 ft³/s Sept. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	627	1250	6900	840	790	1350	11600	1690	2500	323	301	192
2	508	1240	6240	685	635	1350	11300	1540	1810	279	318	188
3	602	1250	5110	700	592	1280	9890	1610	1590	275	292	191
4	627	1210	3580	835	1040	1220	5940	1670	1200	305	658	184
5	665	1230	2890	890	2880	1240	6010	1660	985	438	734	247
6	739	1160	6690	820	4460	1320	8740	1460	891	1500	506	228
7	705	981	11700	735	4080	1320	11200	1320	800	3030	372	205
8	705	281	10200	695	2420	2010	12300	1200	842	5150	255	213
9	698	512	10300	685	1420	2040	11600	1000	821	3110	405	224
10	808	1330	8600	680	1330	1420	10000	965	709	1610	364	235
11	794	1460	5520	645	2830	1290	7730	948	551	926	621	314
12	787	1810	9820	580	10200	1480	6640	993	506	734	780	378
13	455	2360	8060	550	13200	1190	4620	1300	485	557	658	314
14	1340	2760	7830	535	10300	966	2900	1450	501	469	512	271
15	1420	2420	8100	535	9190	1250	2750	1340	807	412	345	263
16	1410	2060	8420	545	9620	10400	3780	1110	1070	402	296	239
17	1320	1860	8940	560	10800	8240	5860	970	1070	359	263	195
18	351	1720	8520	560	10600	8420	5410	890	993	301	255	198
19	391	1370	7540	555	9350	9310	5870	860	734	263	296	220
20	1400	1340	7540	550	9230	12300	5100	4500	580	305	368	224
21	1530	1430	7200	545	9330	9760	4300	5500	378	301	364	220
22	1960	3080	6480	515	9170	10700	3900	5900	359	301	345	188
23	2030	3560	4950	490	8400	10700	6110	6500	368	279	318	188
24	1930	3540	3040	495	5280	11000	6320	6590	469	255	251	373
25	2120	3860	1490	510	2490	11500	7680	6640	427	206	213	448
26	2000	4420	945	520	2080	9420	7320	7260	1080	327	318	388
27	2170	4690	950	535	2330	10100	8620	6300	1240	469	255	529
28	1900	5520	980	545	2660	9330	6660	5150	807	563	275	551
29	1590	6080	1060	550	1790	12100	4920	5070	523	517	225	609
30	1230	6680	1090	645	---	13100	2850	5250	443	545	198	609
31	1250	---	1010	760	---	11900	---	4700	---	314	195	---
TOTAL	36162	72464	181695	19290	158497	189006	207920	93336	25539	24825	11556	8826
MEAN	1167	2415	5861	622	5465	6097	6931	3011	851	801	373	294
MAX	2170	6680	11700	890	13200	13100	12300	7260	2500	5150	780	609
MIN	351	281	945	490	592	966	2750	860	359	206	195	184
CFSM	.43	.90	2.18	.23	2.04	2.27	2.58	1.12	.32	.30	.14	.11
IN.	.50	1.00	2.52	.27	2.20	2.62	2.88	1.29	.35	.34	.16	.12

CAL YR 1983 TOTAL 764564 MEAN 2095 MAX 12600 MIN 141 CFSM .78 IN 10.59
WTR YR 1984 TOTAL 1029116 MEAN 2812 MAX 13200 MIN 184 CFSM 1.05 IN 14.25

03327520 PIPE CREEK NEAR BUNKER HILL, IN

LOCATION.--Lat 40°40'06", long 86°05'44", in NE¼SE¼ sec.29, T.26 N., R.4 E., Miami County, Hydrologic Unit 05120101, on right bank 150 ft downstream from bridge on County Road 125 West, 0.5 mile northeast of Bunker Hill, and at mile 11.4.

DRAINAGE AREA.--159 mi².

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1960-67; May 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 736.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--16 years, 147 ft³/s, 12.56 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,960 ft³/s Jan. 21, 1974, gage height, 14.93 ft; minimum daily, 3.3 ft³/s Feb. 1, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 12	1500	1460	9.18	Mar. 21	0700	1800	10.24
Feb. 12	2100	ice jam	*11.52	Mar. 25	2000	1690	9.93
Feb. 13	0500	*2110	11.17	May 26	1000	1080	7.90
Mar. 16	2300	1650	9.78				

Minimum daily discharge, 6.6 ft³/s Oct. 1,2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	10	84	50	27	74	196	100	149	29	17	9.1
2	6.6	12	67	50	42	72	167	91	131	27	78	11
3	6.9	12	56	52	112	70	153	91	115	26	30	19
4	7.7	13	73	54	127	68	184	96	102	33	62	15
5	8.7	12	145	55	85	80	369	88	94	44	26	11
6	10	12	685	54	70	73	369	79	86	139	20	10
7	8.8	12	665	54	61	66	252	76	79	152	18	9.7
8	7.9	12	359	49	55	60	194	73	74	93	18	9.4
9	7.6	11	227	44	49	54	169	69	68	56	18	11
10	7.7	12	171	39	129	52	145	65	61	46	16	21
11	8.3	22	470	36	730	51	129	64	56	39	15	24
12	9.5	30	1430	34	1900	48	121	71	53	32	14	11
13	12	33	1110	32	1940	46	123	67	50	28	13	9.6
14	17	26	734	31	1180	52	114	67	205	25	13	9.3
15	12	22	544	31	659	66	116	61	105	23	12	9.6
16	9.3	25	342	30	488	1380	151	57	75	21	12	9.6
17	9.1	26	231	30	414	1420	180	56	62	20	12	9.3
18	9.1	24	174	29	358	779	178	55	54	19	12	9.0
19	9.3	23	145	27	346	471	162	56	47	18	12	9.0
20	14	22	122	25	294	1100	144	316	42	18	11	8.7
21	24	20	116	23	242	1680	128	747	38	19	11	8.7
22	95	17	185	21	199	1120	237	541	39	17	14	8.5
23	82	17	148	22	173	754	326	549	45	16	17	8.5
24	37	29	126	24	152	783	278	375	236	72	13	8.5
25	24	29	108	27	131	1140	213	270	111	37	12	10
26	17	27	91	31	113	1530	177	955	64	44	11	11
27	14	35	80	32	95	866	156	514	49	58	10	11
28	13	240	72	30	82	574	135	306	41	38	10	9.6
29	11	192	64	29	76	418	117	256	35	29	10	9.3
30	10	122	59	29	---	301	117	217	31	21	9.9	8.6
31	10	---	54	28	---	235	---	178	---	18	9.4	---
TOTAL	525.1	1099	8937	1102	10329	15483	5500	6606	2397	1257	556.3	329.0
MEAN	16.9	36.6	288	35.5	356	499	183	213	79.9	40.5	17.9	11.0
MAX	95	240	1430	55	1940	1680	369	955	236	152	78	24
MIN	6.6	10	54	21	27	46	114	55	31	16	9.4	8.5
CFSM	.11	.23	1.81	.22	2.24	3.14	1.15	1.34	.50	.26	.11	.07
IN.	.12	.26	2.09	.26	2.42	3.62	1.29	1.55	.56	.29	.13	.08

CAL YR 1983 TOTAL 43544.5 MEAN 119 MAX 3110 MIN 6.4 CFSM .75 IN 10.19
WTR YR 1984 TOTAL 54120.4 MEAN 148 MAX 1940 MIN 6.6 CFSM .93 IN 12.66

03328000 EEL RIVER AT NORTH MANCHESTER, IN

LOCATION.--Lat 40°59'55", long 85°45'50", in NE¼NE¼ sec.5, T.29 N., R.7 E., Wabash County, Hydrologic Unit 05120104, on right bank 200 ft downstream from Main Street bridge in North Manchester, 1.3 miles upstream from Pony Creek, and at mile 52.7.

DRAINAGE AREA.--417 mi², includes that of Pony Creek.

PERIOD OF RECORD.--October 1929 to current year. Prior to April 1930, monthly discharge only, published in WSP 1305. Gage-height records since November 20, 1923 are available from the district office.

REVISED RECORDS.--WSP 1275: 1930-37, 1939, 1940(M), 1942, 1948. WSP 1909: 1957. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 738.00 ft National Geodetic Vertical Datum of 1929. Prior to July 24, 1953, nonrecording gage on downstream side of Second Street bridge, 700 ft upstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Records include flow of Pony Creek.

AVERAGE DISCHARGE.--55 years, 362 ft³/s, 11.79 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,180 ft³/s Mar. 13, 1982, gage height, 13.72 ft; maximum gage height, 14.00 ft Feb. 27, 1936; minimum daily discharge, 16 ft³/s Oct. 19, 1956.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,200 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 12	1600	2630	7.88	Mar. 21	0300	3300	8.89
Feb. 14	0100	*3670	*9.39	Mar. 26	0300	2330	7.38
Mar. 16	2100	3520	9.19	May 26	1700	2770	8.11

Minimum daily discharge, 54 ft³/s Oct. 5-11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	69	458	170	140	262	584	347	563	141	184	82
2	57	71	339	160	150	253	510	325	468	133	227	87
3	56	75	280	160	150	244	463	308	400	131	273	113
4	56	74	267	170	150	237	483	304	339	188	455	115
5	54	69	342	170	150	237	604	290	299	162	563	99
6	54	72	1050	170	140	231	854	273	271	222	351	87
7	54	69	1380	170	130	209	755	260	246	197	249	88
8	54	68	992	170	140	201	574	249	229	152	220	90
9	54	68	661	170	200	195	489	240	214	135	207	93
10	54	69	515	170	311	185	432	233	199	129	190	126
11	54	113	661	160	635	180	395	227	188	131	233	122
12	57	142	2460	160	1660	176	366	220	180	127	180	104
13	74	135	2320	150	3250	176	388	209	190	118	150	92
14	95	126	2000	150	3450	176	412	205	347	111	137	87
15	72	122	1720	150	2860	188	652	195	262	109	126	85
16	65	156	1120	140	2320	2840	1020	188	209	107	116	83
17	65	195	745	140	1790	3210	1210	184	197	106	111	88
18	60	180	565	130	1250	2650	1110	178	211	144	111	82
19	66	164	390	130	932	2140	920	174	184	120	107	79
20	60	227	310	130	776	2520	736	525	166	109	104	77
21	69	255	290	120	646	3110	587	1250	154	107	102	77
22	122	233	270	120	560	2650	767	908	156	104	126	74
23	154	203	250	120	494	2130	1280	1050	565	99	113	77
24	133	242	240	130	432	1810	1020	825	455	460	99	87
25	116	276	220	140	375	1710	761	555	276	1500	95	83
26	95	220	210	140	335	2130	609	2350	207	1090	92	83
27	85	195	200	140	308	1710	517	2290	186	860	88	82
28	80	837	190	140	276	1350	455	1890	168	520	87	83
29	72	1080	190	130	267	1070	395	1460	154	342	87	85
30	72	736	180	130	---	828	378	953	150	255	85	82
31	71	---	170	130	---	682	---	706	---	209	82	---
TOTAL	2290	6541	20985	4560	24277	35690	19726	19371	7833	8318	5350	2692
MEAN	73.9	218	677	147	837	1151	658	625	261	268	173	89.7
MAX	154	1080	2460	170	3450	3210	1280	2350	565	1500	563	126
MIN	54	68	170	120	130	176	366	174	150	99	82	74
CFSM	.18	.52	1.62	.35	2.01	2.76	1.58	1.50	.63	.64	.42	.22
IN.	.20	.58	1.87	.41	2.17	3.18	1.76	1.73	.70	.74	.48	.24

CAL YR 1983 TOTAL 132961 MEAN 364 MAX 4300 MIN 54 CFSM .87 IN 11.86
WTR YR 1984 TOTAL 157633 MEAN 431 MAX 3450 MIN 54 CFSM 1.03 IN 14.06

03328430 WEESAU CREEK NEAR DEEDSVILLE, IN

LOCATION.--Lat 40°54'34", long 86°07'36", in NW¼NW¼ sec.6, T.28 N., R.4 E., Miami County, Hydrologic Unit 05120104, on left bank 100 ft downstream from bridge on County Road 1000 North, and 1.5 miles west of Deedsville.

DRAINAGE AREA.--8.87 mi².

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 785.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--14 years, 9.43 ft³/s, 14.44 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 464 ft³/s Mar. 13, 1982, gage height, 7.37 ft; minimum daily, 0.26 ft³/s Feb. 1, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 90 ft³/s (revised) and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 11	2300	150	4.22	Mar. 25	1900	219	4.93
Feb. 12	1800	209	4.83	May 20	1700	118	3.84
Mar. 16	0400	230	5.04	May 26	0300	*231	*5.05
Mar. 20	1300	120	3.86				

Minimum daily discharge, 0.35 ft³/s Oct. 1-3, 6-9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.35	1.0	5.3	3.5	1.8	4.4	18	7.6	11	2.8	1.6	1.1
2	.35	1.3	3.9	3.3	3.0	4.3	15	6.8	9.2	2.6	1.9	1.0
3	.35	1.3	3.3	3.3	6.0	4.2	15	6.8	8.2	2.8	2.0	1.3
4	.40	1.2	4.4	3.3	12	4.1	25	8.6	7.8	3.4	2.4	1.1
5	.40	1.1	7.8	3.2	8.5	4.5	45	8.4	6.5	3.0	1.7	1.0
6	.35	1.1	56	3.2	6.0	4.2	27	7.4	5.8	3.2	1.5	.96
7	.35	.99	35	3.0	4.3	3.9	19	6.7	5.8	2.8	1.3	.96
8	.35	.96	16	2.8	3.7	3.7	15	6.5	4.8	2.6	1.2	.96
9	.35	1.0	11	2.5	5.5	3.4	13	6.0	4.5	2.4	1.2	1.1
10	.37	1.2	9.0	2.4	10	3.2	11	5.5	4.5	2.4	1.5	1.0
11	.40	3.4	51	2.3	52	3.1	10	5.4	4.5	2.4	1.5	.96
12	.40	2.8	113	2.2	139	3.0	10	5.5	4.2	2.4	1.1	.88
13	.40	2.0	62	2.1	163	3.2	16	5.3	4.5	2.4	1.0	.88
14	.41	1.6	48	2.0	92	3.4	14	5.0	4.5	2.2	.96	.88
15	.45	1.6	40	1.9	60	13	13	4.8	4.2	2.0	.96	.88
16	.45	2.0	27	1.9	42	157	29	4.8	4.2	2.0	.96	.88
17	.45	1.9	21	1.9	32	73	50	4.8	3.9	2.0	.88	.88
18	.45	1.6	16	1.9	26	40	36	4.7	3.9	2.0	.96	.88
19	.45	1.6	14	1.8	22	29	30	4.5	3.7	1.9	.88	.80
20	.47	1.6	12	1.7	18	85	26	56	3.4	2.0	.96	.80
21	.57	1.6	10	1.6	13	59	22	51	3.4	2.0	.96	.72
22	27	1.3	12	1.5	9.2	40	48	27	3.4	1.9	.96	.72
23	13	2.2	10	1.6	7.8	35	40	30	3.4	1.9	.96	.80
24	3.4	3.7	9.2	1.7	6.9	41	25	18	3.2	2.4	.88	.88
25	1.6	2.8	8.0	1.9	6.1	121	18	23	3.0	2.4	.88	1.0
26	1.3	3.2	7.0	2.1	5.4	111	15	141	3.0	4.2	.88	.96
27	1.2	5.1	6.5	2.0	5.1	66	12	56	3.0	5.8	.88	.88
28	1.2	66	6.1	1.9	4.8	50	10	34	2.8	3.2	.96	.80
29	1.1	30	5.6	2.0	4.5	37	9.0	27	2.8	2.2	.96	.80
30	1.1	10	4.8	2.0	---	28	9.0	19	2.8	2.0	.96	.80
31	1.1	---	4.1	1.9	---	23	---	15	---	1.9	.88	---
TOTAL	60.52	157.15	639.0	70.4	769.6	1060.6	645.0	612.1	139.9	79.2	36.62	27.56
MEAN	1.95	5.24	20.6	2.27	26.5	34.2	21.5	19.7	4.66	2.55	1.18	.92
MAX	27	66	113	3.5	163	157	50	141	11	5.8	2.4	1.3
MIN	.35	.96	3.3	1.5	1.8	3.0	9.0	4.5	2.8	1.9	.88	.72
CFSM	.22	.59	2.32	.26	2.99	3.86	2.42	2.22	.53	.29	.13	.10
IN.	.25	.66	2.68	.30	3.23	4.45	2.70	2.57	.59	.33	.15	.12

CAL YR 1983 TOTAL 3614.43 MEAN 9.90 MAX 229 MIN .35 CFSM 1.12 IN 15.16
WTR YR 1984 TOTAL 4297.65 MEAN 11.7 MAX 163 MIN .35 CFSM 1.32 IN 18.02

03328500 EEL RIVER NEAR LOGANSPORT, IN

LOCATION.--Lat 40°46'55", long 86°15'50", in NE¼SE¼ sec.14, T.27 N., R.2 E., Cass County, Hydrologic Unit 05120105, on right bank at downstream side of bridge on Adamsboro Road, 5.5 miles northeast of Logansport, and 7.4 miles upstream from mouth.

DRAINAGE AREA.--789 mi².

PERIOD OF RECORD.--July 1943 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 621.50 ft National Geodetic Vertical Datum of 1929. Prior to Aug. 16, 1956, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--41 years, 743 ft³/s, 12.78 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,200 ft³/s Dec. 9, 1966, gage height, 12.20 ft; minimum daily, 70 ft³/s Mar. 15, 1960, results of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 18, 1943, reached a stage of 13.2 ft, from floodmark, discharge, 17,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 12	2400	5010	7.73	Mar. 21	1000	5720	8.12
Feb. 13	1900	7340	8.92	Mar. 26	1300	6150	8.34
Mar. 17	0700	*7620	*9.05	May 26	2400	5300	7.89

Minimum daily discharge, 135 ft³/s Oct. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	143	179	881	320	270	528	1200	685	1170	288	376	176
2	146	186	637	310	280	524	1050	628	975	276	370	204
3	143	188	514	300	290	507	975	604	834	268	386	235
4	137	186	472	310	290	495	1050	616	737	284	500	213
5	137	184	504	320	280	495	1540	610	666	353	723	234
6	137	182	1050	320	270	485	1520	568	610	358	768	210
7	135	181	2360	320	260	459	1470	539	562	377	539	197
8	137	183	1810	320	250	442	1180	517	528	353	432	189
9	140	182	1270	320	260	407	998	500	505	288	383	201
10	140	189	951	320	340	390	877	489	484	268	415	207
11	146	232	1050	310	600	380	799	478	452	272	350	225
12	149	254	3830	300	2950	380	751	473	431	260	374	234
13	161	262	4390	290	6930	380	792	452	473	272	331	215
14	167	245	3200	290	6720	397	799	447	505	249	280	198
15	182	239	2770	280	5210	449	863	431	647	230	255	189
16	182	241	2130	270	3980	5060	1380	416	539	216	244	184
17	167	251	1420	270	3150	7060	1940	406	478	212	246	181
18	164	293	1070	250	2450	4720	1880	406	462	206	228	180
19	158	306	700	240	1840	3560	1630	401	452	219	222	181
20	182	291	600	230	1490	3960	1340	1050	401	226	214	177
21	195	309	550	230	1240	5500	1100	3230	367	212	204	169
22	391	356	520	220	1070	4620	1160	2370	349	206	202	165
23	416	352	480	230	945	3740	2170	2150	349	195	217	166
24	344	339	460	240	849	3550	2070	1980	870	195	226	167
25	280	353	430	260	760	3910	1550	1370	691	797	202	186
26	245	395	420	260	681	5930	1210	4020	489	1860	193	188
27	217	367	400	260	632	4010	1020	4730	396	1550	188	185
28	201	747	380	260	594	2990	892	3360	358	1210	186	181
29	189	1590	360	250	555	2320	792	2750	326	790	182	179
30	182	1300	340	250	---	1760	737	2070	305	562	180	177
31	177	---	330	250	---	1410	---	1470	---	442	173	---
TOTAL	5890	10562	36279	8600	45436	70818	36735	40216	16411	13494	9789	5793
MEAN	190	352	1170	277	1567	2284	1225	1297	547	435	316	193
MAX	416	1590	4390	320	6930	7060	2170	4730	1170	1860	768	235
MIN	135	179	330	220	250	380	737	401	305	195	173	165
CFSM	.24	.45	1.48	.35	1.99	2.90	1.55	1.64	.69	.55	.40	.25
IN.	.28	.50	1.71	.41	2.14	3.34	1.73	1.90	.77	.64	.46	.27

CAL YR 1983 TOTAL 262718 MEAN 720 MAX 8770 MIN 135 CFSM .91 IN 12.39
WTR YR 1984 TOTAL 300023 MEAN 820 MAX 7060 MIN 135 CFSM 1.04 IN 14.15

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03329000 WABASH RIVER AT LOGANSPORT, IN

LOCATION.--Lat 40°44'47", long 86°22'39", in SW¼NE¼ sec.35, T.27 N., R.1 E., Cass County, Hydrologic Unit 05120105, on left bank 150 ft downstream from Cicott Street bridge in Logansport, 1,000 ft downstream from Eel River, and at mile 353.7.

DRAINAGE AREA.--3,779 mi².

PERIOD OF RECORD.--April to September, November and December 1903, March to November 1904, March 1905 to July 1906, May 1923 to current year. January, February, and December 1904, January and February 1905 (gage heights only). Gage-height records collected at same site December 1910 to December 1916, and since January 1926 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 783: 1934. WSP 1335: 1904, 1925(M), 1926-30, 1931(M), 1932-35, 1937-39, 1948. WSP 1385: 1903, 1905-6, 1923-25. WSP 1505: 1906(M). WSP 2109: Drainage area. WDR IN-81-1: 1979.

GAGE.--Water-stage recorder. Datum of gage is 573.28 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). See WSP 1705 for history of changes prior to Oct. 1, 1927.

REMARKS.--Records good. Flow partially regulated by Huntington Lake, Salamonie Lake, and Mississinewa Lake.

AVERAGE DISCHARGE.--61 years (1923 to current year), 3,318 ft³/s, 11.92 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 89,800 ft³/s May 18, 1943, gage height, 21 32 ft; minimum daily, 135 ft³/s Sept. 26, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 25.3 ft Mar. 26, 1913, from floodmarks, discharge, 140,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22,200 ft³/s Mar.25, gage height, 10.41 ft; minimum daily, 323 ft³/s Sept. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	705	1310	7560	1350	1080	1890	13200	2600	4250	758	711	326
2	711	1320	6890	1170	1050	1820	12700	2260	3120	675	835	401
3	702	1330	5530	1110	1040	1760	11700	2260	2640	631	806	446
4	705	1290	4070	1180	1340	1690	7160	2390	2230	695	927	391
5	730	1300	3280	1300	2450	1700	8160	2390	1770	763	1420	412
6	776	1280	7080	1280	4100	1720	10000	2170	1650	1660	1230	444
7	777	1150	14900	1200	4660	1730	12800	1950	1470	2920	982	404
8	774	780	12600	1140	3620	2150	13800	1780	1460	5810	795	378
9	773	542	11900	1100	2280	2440	13300	1560	1420	3720	774	407
10	802	1250	10300	1080	1850	1950	11400	1460	1310	2250	806	432
11	873	1620	6990	1050	4210	1640	9060	1470	1130	1260	802	506
12	861	1790	15200	970	13800	1760	7800	1530	1030	1130	1080	593
13	717	2510	13600	924	20200	1680	6050	1510	1060	942	943	565
14	981	2840	11400	892	19500	1310	4180	1720	1120	848	891	476
15	1360	2790	11100	880	15800	1540	3690	1770	1380	745	627	450
16	1360	2190	10400	878	14100	15300	5130	1620	1610	707	543	424
17	1340	2080	10100	885	14600	17800	7850	1330	1600	682	508	381
18	817	2010	9280	880	14000	14300	7570	1270	1530	615	472	350
19	407	1630	7730	860	11900	13400	7900	1250	1310	565	459	360
20	1100	1560	7690	838	11000	17600	6890	2600	1110	575	515	386
21	1570	1570	7400	822	10900	17800	5860	10000	892	605	561	369
22	2300	2780	6920	796	10300	17000	5260	9330	819	588	550	341
23	2520	3650	5520	770	9870	15700	8410	9330	826	570	522	323
24	2180	3530	4050	775	7090	15800	8740	9010	1350	555	500	390
25	2240	3740	2470	810	3650	16800	9510	8800	1240	847	395	631
26	2170	4420	1650	834	2850	18400	8820	12200	1380	1700	439	588
27	2180	4770	1520	855	2850	15800	9680	12200	1720	1770	411	667
28	2000	5960	1500	860	3260	13000	8220	9240	1400	1560	422	725
29	1760	7470	1530	860	2560	14800	6200	8220	992	1240	396	771
30	1300	7780	1550	902	---	15300	4210	7650	884	1140	348	778
31	1290	---	1480	1030	---	13800	---	6750	---	810	326	---
TOTAL	38781	78242	223190	30281	215910	279380	255250	139620	45703	39336	20996	14115
MEAN	1251	2608	7200	977	7445	9012	8508	4504	1523	1269	677	471
MAX	2520	7780	15200	1350	20200	18400	13800	12200	4250	5810	1420	778
MIN	407	542	1480	770	1040	1310	3690	1250	819	555	326	323
CFSM	.33	.69	1.91	.26	1.97	2.39	2.25	1.19	.40	.34	.18	.13
IN.	.38	.77	2.20	.30	2.13	2.75	2.51	1.37	.45	.39	.21	.14

CAL YR 1983 TOTAL 1060625 MEAN 2906 MAX 25000 MIN 255 CFSM .77 IN 10.44
WTR YR 1984 TOTAL 1380804 MEAN 3773 MAX 20200 MIN 323 CFSM 1.00 IN 13.59

03329400 RATTLESNAKE CREEK NEAR PATTON, IN

LOCATION.--Lat 40°42'46", long 86°41'49", in NW¼SW¼ sec.7, T.26 N., R.2 W., Carroll County, Hydrologic Unit 05120105, on left bank 5 ft downstream from bridge on County Road 900 West, and 2.5 miles northeast of Patton.

DRAINAGE AREA.--6.83 mi².

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 644.97 ft National Geodetic Vertical Datum of 1929. Prior to Nov. 28, 1979, at datum 1.00 ft higher.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--16 years, 6.93 ft³/s, 13.78 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 456 ft ³/s June 5, 1981, gage height, 5.12 ft; maximum gage height, 5.30 ft June 14, 1975; minimum daily discharge, 0.10 ft³/s Sept. 8-10, 13, 14, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 65 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 13	0600	135	4.12	May 20	1400	109	3.95
Mar. 25	1400	100	3.87	May 25	2300	*418	*5.04

Minimum daily discharge, 0.18 ft³/s Sept. 13, 17-22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	.84	2.1	2.2	1.0	3.2	9.0	6.6	13	2.0	.66	.20
2	.33	2.0	2.0	2.2	1.5	3.1	8.2	6.6	11	2.0	.61	.31
3	.35	1.0	1.8	2.2	5.3	3.0	9.4	6.7	9.3	2.0	.61	.48
4	.35	.90	2.5	2.3	3.8	2.9	13	6.6	8.3	2.0	.61	.23
5	.44	.84	3.4	2.3	2.9	3.5	20	6.1	7.7	2.0	.56	.20
6	.60	.84	11	2.3	2.5	3.1	13	5.9	7.1	2.5	.52	.20
7	.64	.84	7.1	2.3	2.3	2.8	11	5.7	6.3	2.0	.48	.20
8	.71	.78	4.6	2.2	2.2	2.7	9.4	5.4	5.4	1.8	.48	.20
9	.79	.78	3.8	2.1	2.0	2.6	8.4	5.4	4.8	1.7	.43	.23
10	.93	1.3	3.2	1.9	3.7	2.5	7.4	5.1	4.5	1.6	.43	.28
11	.98	2.3	28	1.8	18	2.4	7.1	5.1	4.1	1.6	.35	.23
12	.98	2.2	29	1.6	63	2.3	7.3	4.8	3.9	1.5	.35	.20
13	1.0	2.0	15	1.5	93	2.2	8.2	4.8	3.8	1.4	.35	.18
14	.96	1.9	16	1.4	41	2.3	7.4	4.4	3.5	1.3	.31	.20
15	.96	2.1	13	1.3	27	6.5	8.8	4.2	3.2	1.3	.31	.20
16	.93	2.3	8.4	1.3	20	49	14	4.2	3.2	1.3	.31	.20
17	.96	2.2	6.4	1.2	18	25	18	4.2	3.1	1.3	.31	.18
18	.98	2.1	5.4	1.1	14	14	15	4.2	3.4	1.2	.31	.18
19	1.1	2.0	4.6	1.1	14	13	13	4.2	2.9	1.1	.28	.18
20	1.9	2.2	4.1	1.0	10	51	10	50	2.7	1.2	.26	.18
21	2.2	2.1	3.7	.98	8.6	32	9.2	38	2.6	1.1	.26	.18
22	.79	1.9	3.7	.94	7.4	29	26	30	3.0	.97	.28	.18
23	1.3	2.2	4.1	1.0	6.6	25	21	35	2.7	.97	.23	.20
24	.72	2.2	2.9	1.1	5.7	20	14	19	3.0	1.3	.23	.20
25	.61	2.0	2.9	1.1	4.9	63	12	63	2.5	1.2	.20	.31
26	.78	2.0	2.8	1.2	4.3	45	11	138	2.4	6.2	.20	.39
27	.90	3.2	2.7	1.4	3.9	28	9.4	39	2.4	3.2	.20	.23
28	.84	7.1	2.6	1.3	3.6	21	7.8	29	2.2	1.1	.35	.23
29	.84	3.8	2.5	1.2	3.3	15	7.6	27	2.1	.84	.20	.23
30	.84	2.5	2.4	1.1	---	12	7.6	20	2.1	.72	.20	.23
31	.84	---	2.3	1.1	---	10	---	16	---	.66	.20	---
TOTAL	26.86	60.42	204.0	47.72	393.5	497.1	343.2	604.2	136.2	51.06	11.08	6.84
MEAN	.87	2.01	6.58	1.54	13.6	16.0	11.4	19.5	4.54	1.65	.36	.23
MAX	2.2	7.1	29	2.3	93	63	26	138	13	6.2	.66	.48
MIN	.31	.78	1.8	.94	1.0	2.2	7.1	4.2	2.1	.66	.20	.18
CFSM	.13	.29	.96	.23	1.99	2.34	1.67	2.86	.67	.24	.05	.03
IN.	.15	.33	1.11	.26	2.14	2.71	1.87	3.29	.74	.28	.06	.04

CAL YR 1983 TOTAL 1954.16 MEAN 5.35 MAX 145 MIN .10 CFSM .78 IN 10.64
WTR YR 1984 TOTAL 2382.18 MEAN 6.51 MAX 138 MIN .18 CFSM .95 IN 12.97

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03329700 DEER CREEK NEAR DELPHI, IN

LOCATION.--Lat 40°35'25", long 86°37'15", in NE¼NE¼ sec.27, T.25 N., R.2 W., Carroll County, Hydrologic Unit 05120105, on downstream side of left wingwall of highway bridge, 2.6 miles northeast of Delphi Post Office, and 4.8 miles upstream from mouth.

DRAINAGE AREA.--274 mi².

PERIOD OF RECORD.--October 1943 to current year. Prior to March 1944 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1944, 1947-48. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 553.81 ft National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark, levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good.

AVERAGE DISCHARGE.--41 years, 242 ft³/s, 11.99 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,400 ft³/s June 10, 1958, gage height, 18.26 ft; minimum daily, 6.2 ft³/s Sept. 25-28, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1943 reached a stage of 19.8 ft, from floodmarks, discharge, 18,000 ft³/s, from rating curve extended above 8,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 12	1845	2050	6.31	Mar. 17	0145	2350	6.72
Feb. 12	0615	ice jam	*9.71	Mar. 20	2315	2040	6.30
Feb. 13	0200	*3780	8.43	Mar. 26	0330	2450	6.86

Minimum daily discharge, 21 ft³/s Oct. 1-4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	38	143	105	56	144	376	206	317	64	40	28
2	21	43	118	104	97	140	321	188	274	58	39	30
3	21	46	105	105	140	132	307	184	250	54	118	94
4	21	44	116	106	230	130	349	189	225	60	78	114
5	22	42	165	108	170	160	523	177	207	74	116	61
6	22	41	666	107	130	151	563	161	191	92	97	46
7	23	41	866	104	120	137	414	153	172	118	68	37
8	23	42	530	96	110	133	328	147	160	96	70	33
9	23	41	349	90	100	119	292	140	150	82	52	33
10	23	46	265	84	200	110	261	136	135	66	55	34
11	24	67	554	78	700	105	233	136	126	60	47	36
12	25	98	1890	72	2200	100	227	140	118	55	40	39
13	28	97	1570	66	3530	94	236	130	112	50	38	36
14	29	76	1030	62	2260	104	216	123	118	48	37	33
15	29	69	829	56	1420	125	220	115	120	46	35	34
16	29	68	563	56	1050	1880	317	109	120	44	34	31
17	30	69	396	56	893	2120	474	106	108	42	34	30
18	30	74	309	56	761	1280	445	105	99	45	35	29
19	30	71	240	54	701	866	390	105	91	47	33	28
20	41	69	205	50	580	1540	327	421	86	50	32	27
21	45	65	180	48	472	1830	281	1270	81	49	30	26
22	195	60	153	45	390	1360	489	898	82	47	40	25
23	180	61	170	49	336	1090	792	1130	87	43	39	25
24	118	57	260	55	294	1200	598	813	160	48	48	26
25	76	60	200	61	249	1520	464	585	185	50	37	27
26	58	66	170	66	210	2230	381	1690	106	62	32	30
27	48	97	160	64	193	1430	329	1340	94	66	30	28
28	44	322	150	62	166	1020	281	792	82	68	62	30
29	42	334	140	60	151	771	241	607	75	52	48	30
30	39	204	135	60	---	563	243	483	66	46	35	28
31	38	---	115	58	---	441	---	377	---	41	30	---
TOTAL	1398	2508	12742	2243	17909	23025	10918	13156	4197	1823	1529	1108
MEAN	45.1	83.6	411	72.4	618	743	364	424	140	58.8	49.3	36.9
MAX	195	334	1890	108	3530	2230	792	1690	317	118	118	114
MIN	21	38	105	45	56	94	216	105	66	41	30	25
CFSM	.17	.31	1.50	.26	2.26	2.71	1.33	1.55	.51	.22	.18	.14
IN.	.19	.34	1.73	.30	2.43	3.13	1.48	1.79	.57	.25	.21	.15

CAL YR 1983 TOTAL 81697 MEAN 224 MAX 7560 MIN 19 CFSM .82 IN 11.09
WTR YR 1984 TOTAL 92556 MEAN 253 MAX 3530 MIN 21 CFSM .92 IN 12.57

03330500 TIPPECANOE RIVER AT OSWEGO, IN

LOCATION.--Lat 41°19'14", long 85°47'21", in NE¼NE¼ sec.14, T.33 N., R.6 E., Kosciusko County, Hydrologic Unit 05120106, on left bank 10 ft downstream from dam at Tippecanoe Lake Outlet in Oswego, 3 miles east of Leesburg, and at mile 158.9.

DRAINAGE AREA.--113 mi².

PERIOD OF RECORD.--October 1949 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 830.00 ft National Geodetic Vertical Datum of 1929. Prior to Aug. 12, 1953, nonrecording gage at same site and datum.

REMARKS.--Records good. Occasional regulation by flashboards at lake outlet.

AVERAGE DISCHARGE.--35 years, 102 ft³/s, 12.26 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 950 ft³/s Mar. 21, 1982, gage height, 9.25 ft; minimum daily, 0.08 ft³/s Aug. 4, 5, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 445 ft³/s May 31, gage height, 8.11 ft; minimum daily, 8.3 ft³/s Oct. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	47	93	151	66	172	306	193	442	105	105	20
2	13	47	99	146	63	163	284	189	432	90	104	20
3	13	47	108	142	64	152	269	180	417	71	102	20
4	13	45	117	138	63	145	252	172	384	70	100	20
5	13	44	121	133	62	137	242	165	355	59	95	20
6	12	47	130	120	61	131	235	159	331	24	83	19
7	12	51	127	107	60	124	227	148	297	24	86	20
8	12	49	124	96	58	122	217	138	263	24	87	20
9	11	49	124	88	58	117	205	111	242	23	85	20
10	11	47	121	82	58	112	194	126	237	22	82	22
11	11	47	126	76	58	106	185	125	206	23	75	23
12	10	44	146	68	63	102	178	119	177	23	55	23
13	10	42	165	62	83	101	172	115	162	31	54	23
14	8.9	40	185	58	114	97	165	110	159	45	47	33
15	8.5	41	203	54	152	96	167	95	154	44	20	54
16	8.3	41	219	51	193	109	173	54	150	43	20	45
17	8.4	41	229	48	238	127	176	25	145	42	21	18
18	9.0	40	233	46	279	148	182	23	140	37	22	19
19	9.4	41	233	44	299	181	186	23	132	20	22	19
20	10	41	229	43	313	227	187	37	117	20	21	18
21	10	40	227	41	306	275	191	57	100	20	21	18
22	33	40	225	39	290	319	199	62	74	20	22	17
23	67	41	212	38	271	345	202	111	104	20	22	16
24	63	40	203	38	250	358	211	126	118	29	22	16
25	60	43	195	42	233	365	220	132	130	59	22	17
26	54	47	187	47	215	370	227	183	130	68	21	19
27	51	56	180	51	206	370	229	263	130	90	20	18
28	49	71	174	57	195	370	223	343	127	111	20	17
29	49	77	169	62	181	360	215	384	121	114	20	16
30	49	84	161	69	---	345	197	417	115	111	20	15
31	47	---	156	68	---	326	---	438	---	108	20	---
TOTAL	748.5	1430	5221	2305	4552	6472	6316	4823	6091	1590	1516	645
MEAN	24.1	47.7	168	74.4	157	209	211	156	203	51.3	48.9	21.5
MAX	67	84	233	151	313	370	306	438	442	114	105	54
MIN	8.3	40	93	38	58	96	165	23	74	20	20	15
CFSM	.21	.42	1.49	.66	1.39	1.85	1.87	1.38	1.80	.45	.43	.19
IN.	.25	.47	1.72	.76	1.50	2.13	2.08	1.59	2.01	.52	.50	.21

CAL YR 1983 TOTAL 37931.3 MEAN 104 MAX 405 MIN 6.9 CFSM .92 IN 12.49
WTR YR 1984 TOTAL 41709.5 MEAN 114 MAX 442 MIN 8.3 CFSM 1.01 IN 13.73

03331110 WALNUT CREEK NEAR WARSAW, IN

LOCATION.--Lat 41°12'17", long 85°52'11", in NW¼NE¼ sec.30, T.32 N., R.6 E., Kosciusko County, Hydrologic Unit 05120106, on left bank 10 ft upstream from bridge on County Road 200 South, 0.3 mile downstream from small right-bank tributary, and 2.5 miles south of court house in Warsaw.

DRAINAGE AREA.--19.6 mi².

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 823.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Flow occasionally regulated by lakes upstream.

AVERAGE DISCHARGE.--15 years, 17.7 ft³/s, 12.26 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 561 ft³/s June 13, 1981, gage height, 5.38 ft; minimum daily, 0.44 ft³/s Sept. 8, 1983.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 241 ft³/s May 25, gage height, 3.83 ft; minimum daily, 0.69 ft³/s Oct. 9-12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.6	19	8.6	5.5	20	38	21	57	16	7.9	2.2
2	1.1	1.3	13	8.4	6.1	18	35	20	48	13	6.8	2.0
3	.90	1.3	11	8.2	8.2	16	32	19	42	12	9.9	3.5
4	.77	1.2	11	8.2	11	14	34	18	35	11	19	3.3
5	.77	1.1	12	8.2	11	13	36	18	31	13	30	2.7
6	.77	1.1	30	7.9	10	11	36	18	28	15	30	2.5
7	.77	1.1	34	8.3	9.8	10	34	16	25	16	24	2.7
8	.77	1.1	31	8.0	9.6	9.6	32	12	22	14	16	2.5
9	.69	1.2	26	7.2	9.5	12	30	12	19	12	12	2.7
10	.69	1.6	23	7.0	9.4	11	28	11	16	11	10	2.9
11	.69	3.4	28	6.9	17	10	26	11	14	9.9	8.7	2.7
12	.69	7.8	77	6.9	48	10	24	11	13	9.9	7.0	2.5
13	.71	7.7	102	6.8	110	9.9	27	11	13	9.0	6.1	2.3
14	.77	7.0	79	6.8	118	9.9	27	11	16	7.5	5.0	2.3
15	.77	6.6	58	6.7	96	12	28	11	17	6.5	4.2	2.3
16	.77	7.8	47	6.7	75	78	35	9.9	16	5.8	3.8	2.3
17	.77	7.9	44	6.6	63	96	42	9.4	16	5.2	3.4	2.5
18	.77	7.9	34	6.3	55	82	44	9.4	17	4.7	3.2	2.7
19	.77	8.6	25	5.6	49	65	42	9.0	15	4.2	3.0	2.7
20	.77	9.0	22	5.0	44	74	37	19	14	3.9	3.0	2.5
21	.77	9.0	18	5.3	39	85	33	38	12	3.7	4.0	2.5
22	1.7	9.0	16	9.8	34	79	34	44	11	3.7	4.2	2.3
23	2.1	8.8	31	15	31	67	46	47	32	3.5	3.7	2.2
24	2.2	9.0	57	17	28	64	48	44	47	7.9	3.0	2.2
25	1.9	9.0	22	11	26	65	44	60	44	22	2.8	1.9
26	1.6	8.7	15	8.6	23	75	38	195	37	29	2.7	2.0
27	1.3	9.7	13	7.2	21	71	33	167	31	34	2.5	2.0
28	1.1	28	11	6.4	21	64	29	133	26	25	2.4	1.9
29	1.4	32	9.8	5.7	21	57	26	108	22	19	2.3	1.9
30	1.6	26	9.0	5.3	---	50	24	86	18	13	2.3	1.9
31	1.6	---	8.7	5.8	---	43	---	69	---	9.0	2.3	---
TOTAL	33.08	235.5	936.5	241.4	1009.1	1301.4	1022	1267.7	754	369.4	245.2	72.6
MEAN	1.07	7.85	30.2	7.79	34.8	42.0	34.1	40.9	25.1	11.9	7.91	2.42
MAX	2.2	32	102	17	118	96	48	195	57	34	30	3.5
MIN	.69	1.1	8.7	5.0	5.5	9.6	24	9.0	11	3.5	2.3	1.9
CFSM	.06	.40	1.54	.40	1.78	2.14	1.74	2.09	1.28	.61	.40	.12
IN.	.06	.45	1.78	.46	1.92	2.47	1.94	2.41	1.43	.70	.47	.14

CAL YR 1983 TOTAL 6105.80 MEAN 16.7 MAX 189 MIN .44 CFSM .85 IN 11.59
WTR YR 1984 TOTAL 7487.88 MEAN 20.5 MAX 195 MIN .69 CFSM 1.05 IN 14.21

03331500 TIPPECANOE RIVER NEAR ORA, IN

LOCATION.--Lat 41°09'26", long 86°33'49", in SE¼SE¼ sec.6, T.31 N., R.1 W., Pulaski County, Hydrologic Unit 05120106, on right bank at downstream side of bridge on County Road 200 East, 1.0 mile upstream from Bartee ditch, 1.3 miles southwest of Ora, and at mile 78.5

DRAINAGE AREA.--856 mi².

PERIOD OF RECORD.--September 1943 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1944(M). WSP 1505: 1949-50(P). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 692.91 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to July 30, 1956, nonrecording gage on upstream side of old highway bridge, 120 ft downstream. July 30, 1956, to Dec. 20, 1964, water-stage recorder on right bank at downstream side of old highway bridge, and Dec. 21, 1964, to Aug. 19, 1965, nonrecording gage on right bank 500 ft downstream. All gages at same datum.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--41 years, 832 ft³/s, 13.20 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,660 ft³/s June 15, 1981, gage height, 15.08 ft; minimum daily, 87 ft³/s Sept. 13, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,300 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 15	0600	3380	11.57	May 28	0900	*3900	*11.94
Mar. 27	1600	3370	11.41				

Minimum daily discharge, 180 ft³/s Oct. 8, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	189	295	560	520	390	944	2280	1250	3120	876	468	220
2	189	288	542	500	400	934	2060	1180	2860	777	434	223
3	191	290	517	490	430	898	1900	1120	2580	702	437	230
4	186	288	506	490	460	856	1860	1090	2230	656	442	240
5	183	287	512	510	460	828	1860	1100	1940	639	459	238
6	184	293	616	520	440	803	1870	1070	1720	611	446	236
7	183	295	809	530	430	775	1780	1030	1550	597	415	237
8	180	296	822	530	410	752	1650	987	1380	560	411	237
9	181	288	797	530	430	719	1550	930	1270	517	398	239
10	181	286	792	520	560	660	1440	885	1170	470	384	256
11	180	293	800	500	750	640	1340	847	1060	443	389	254
12	181	294	1120	490	1200	630	1280	828	975	445	376	262
13	187	294	1480	480	2360	640	1310	803	964	435	363	254
14	205	302	1410	460	3060	640	1300	787	1080	423	340	248
15	209	303	1350	450	3340	682	1270	747	1120	403	319	246
16	213	309	1320	440	3090	1280	1300	705	1030	382	309	246
17	213	307	1180	430	2800	2280	1430	677	994	372	297	242
18	240	314	900	410	2520	2470	1500	649	987	361	281	242
19	270	333	700	400	2250	2240	1490	613	944	353	269	249
20	263	340	680	390	2010	2240	1450	700	847	340	262	240
21	246	337	690	370	1800	2640	1400	1270	757	342	256	234
22	296	334	720	360	1630	2910	1490	1390	795	331	252	228
23	364	340	740	360	1480	2840	1780	1420	1180	322	258	225
24	346	346	740	380	1360	2770	1830	1560	1770	330	248	224
25	354	347	700	410	1270	2790	1720	1420	1990	410	246	223
26	349	352	670	420	1160	3000	1620	2030	1860	472	244	227
27	341	353	640	420	1100	3330	1540	3340	1730	581	238	226
28	335	461	610	420	1030	3250	1450	3840	1500	628	231	233
29	321	579	580	410	975	3020	1360	3570	1210	623	225	236
30	308	569	560	400	---	2780	1330	3380	1010	572	223	235
31	302	---	540	390	---	2540	---	3290	---	506	219	---
TOTAL	7570	10013	24603	13930	39595	53781	47440	44508	43623	15479	10139	7130
MEAN	244	334	794	449	1365	1735	1581	1436	1454	499	327	238
MAX	364	579	1480	530	3340	3330	2280	3840	3120	876	468	262
MIN	180	286	506	360	390	630	1270	613	757	322	219	220
CFSM	.29	.39	.93	.53	1.60	2.03	1.85	1.68	1.70	.58	.38	.28
IN.	.33	.44	1.07	.61	1.72	2.34	2.06	1.93	1.90	.67	.44	.31

CAL YR 1983 TOTAL 297024 MEAN 814 MAX 4770 MIN 161 CFSM .95 IN 12.91
WTR YR 1984 TOTAL 317811 MEAN 868 MAX 3840 MIN 180 CFSM 1.01 IN 13.81

03333000 TIPPECANOE RIVER NEAR DELPHI, IN

LOCATION.--Lat 40°37'02", long 86°45'39", in NW¼NE¼ sec.16, T.25 N., R.3 W., Carroll County, Hydrologic Unit 05120106, on right bank 2 miles northeast of Springboro, 1.7 miles downstream from Big Creek, 5 miles northwest of Delphi, and at mile 15.1.

DRAINAGE AREA.--1,865 mi².

PERIOD OF RECORD.--March to December 1903, March to December 1904, March 1905 to July 1906, November and December 1908, July 1939 to current year. Published as "at Springboro" 1903-08.

REVISED RECORDS.--WSP 973: 1942. WSP 1335: 1905-6. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 552.01 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Mar. 14, 1903, to July 20, 1906, and Nov. 2 to Dec. 31, 1908, nonrecording gage at site 5.5 miles downstream at different datum.

REMARKS.--Records good. Flow regulated by upstream reservoirs.

AVERAGE DISCHARGE.--45 years (water years 1940 to current year), 1,666 ft³/s, 12.13 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,600 ft³/s Feb. 10, 1959, gage height, 15.10 ft; minimum daily, 1.0 ft³/s Nov. 2, 3, 1954, caused by repair work at Oakdale Dam, 6.5 miles upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,500 ft³/s May 26, gage height, 11.86 ft; minimum daily, 215 ft³/s Sept. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	344	505	1070	1300	876	1790	3800	2270	4700	1530	771	256
2	269	618	1090	1300	827	1810	3350	2130	4430	1200	797	461
3	317	614	1000	1300	1120	1970	3350	2040	3700	1110	668	659
4	316	421	1260	1200	1340	1810	3550	2160	3550	1190	776	255
5	321	421	1090	1400	1370	1820	3780	2030	3020	1080	767	388
6	324	421	1960	1070	1240	1720	3550	2100	2640	1160	599	357
7	316	531	2180	1210	1360	1550	2950	2010	2400	1070	772	359
8	270	421	2010	1110	1390	1520	2930	1860	2370	963	798	330
9	269	521	1750	1100	986	1410	2780	1830	2100	914	680	685
10	269	547	1740	1050	1220	1430	2520	1620	1770	1020	672	370
11	322	561	2310	1100	1690	1390	2280	1750	1880	889	699	563
12	315	421	4860	1210	4700	1450	2400	1510	1630	821	461	429
13	324	557	4190	914	10300	1470	2390	1590	1830	819	589	293
14	321	426	3760	852	9330	1440	2610	1690	2010	893	595	261
15	398	564	3740	1130	6990	1570	2430	1590	1880	548	540	260
16	394	549	2790	1000	6490	5310	2840	1230	1740	665	436	699
17	311	319	2510	793	5840	5960	3250	1470	1750	664	595	1750
18	316	857	1750	905	5190	4840	3240	1210	1680	627	489	2000
19	353	608	1400	850	4560	4350	2970	1520	1570	607	507	1970
20	676	545	1470	780	4400	6300	2820	3100	1480	794	372	1930
21	446	646	1250	670	3660	7190	2570	5250	1380	515	374	597
22	1430	582	1570	700	3180	6130	3920	4260	1220	717	594	368
23	1060	594	1340	730	2960	5770	5580	4400	1500	561	430	333
24	906	621	1250	780	2870	5620	4140	3700	1930	592	329	215
25	421	646	1000	800	2470	6670	3920	3680	2040	637	392	358
26	795	619	1100	814	2290	9260	3550	13000	2170	930	459	482
27	421	855	1120	869	2210	6810	2860	10100	2330	947	335	403
28	688	1420	1170	841	1890	6260	2840	7050	2050	952	550	339
29	393	1470	1200	778	1630	5380	2400	7460	1710	997	333	353
30	502	1300	1220	954	---	4490	2550	6280	1550	842	431	389
31	530	---	1270	679	---	4050	---	5390	---	942	320	---
TOTAL	14337	19180	57420	30189	94379	118540	94120	107280	66010	27196	17130	18112
MEAN	462	639	1852	974	3254	3824	3137	3461	2200	877	553	604
MAX	1430	1470	4860	1400	10300	9260	5580	13000	4700	1530	798	2000
MIN	269	319	1000	670	827	1390	2280	1210	1220	515	320	215
CFSM	.25	.34	.99	.52	1.75	2.05	1.68	1.86	1.18	.47	.30	.32
IN.	.29	.38	1.15	.60	1.88	2.36	1.88	2.14	1.32	.54	.34	.36

CAL YR 1983 TOTAL 617911 MEAN 1693 MAX 14300 MIN 225 CFSM .91 IN 12.33
WTR YR 1984 TOTAL 663893 MEAN 1814 MAX 13000 MIN 215 CFSM .97 IN 13.24

03333450 WILDCAT CREEK NEAR JEROME, IN

LOCATION.--Lat 40°26'29", long 85°55'08", in NE¼SE¼ sec.14, T.23 N., R.5 E., Howard County, Hydrologic Unit 05120107, on right bank at downstream side of bridge on County Road 1100 East, 0.5 mile downstream from Mud Creek, 1.5 miles southeast of Jerome, and at mile 79.9.

DRAINAGE AREA.--146 mi².

PERIOD OF RECORD.--July 1961 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 820.04 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good above 10 cfs, fair below.

AVERAGE DISCHARGE.--23 years, 131 ft³/s, 12.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,140 ft³/s June 3, 1980, gage height, 13.34 ft; minimum daily, 0.89 ft³/s Jan. 24-26, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of about 18 ft, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,200 ft³/s and maximum(*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 12	1300	1630	8.07	Mar. 20	2200	*2050	*9.02
Mar. 17	0130	1540	7.84	Mar. 26	0115	1340	7.27

Minimum daily discharge, 1.7 ft³/s Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	8.0	141	50	27	75	192	94	127	17	6.2	3.9
2	2.0	9.5	110	50	32	80	162	83	111	16	5.7	4.3
3	2.0	8.7	95	51	80	77	150	85	98	16	5.7	11
4	1.7	7.7	163	48	180	73	194	87	85	22	6.8	9.6
5	4.8	7.0	285	49	150	84	362	73	79	54	12	8.4
6	6.8	6.2	726	47	88	96	347	64	72	72	12	7.3
7	4.3	6.5	784	45	62	96	243	62	64	68	15	6.2
8	3.1	6.9	447	39	54	88	185	59	61	40	16	6.2
9	3.9	6.6	295	38	47	84	160	56	56	28	63	9.0
10	3.9	25	224	37	264	76	136	52	50	24	62	11
11	3.9	248	437	34	1090	69	116	54	47	20	35	10
12	4.3	222	1480	31	1030	56	108	130	42	18	25	8.4
13	8.4	116	1050	30	1090	57	108	141	42	16	18	7.3
14	9.0	75	694	29	888	57	98	111	45	14	14	7.3
15	6.8	59	567	27	564	62	165	87	38	12	11	7.9
16	5.7	73	371	27	435	1010	277	75	36	12	8.4	5.7
17	5.2	80	254	27	377	1340	283	68	35	11	7.3	5.7
18	5.7	69	194	28	347	840	250	64	33	11	10	5.2
19	6.2	59	155	26	360	602	228	63	31	9.6	26	5.2
20	9.0	51	131	24	312	1470	189	108	28	10	20	5.2
21	12	45	122	22	256	1610	160	221	27	12	14	4.3
22	30	36	190	20	210	1000	222	201	26	9.6	14	4.8
23	35	40	210	20	182	778	364	235	27	8.4	11	6.8
24	21	92	150	23	158	770	293	235	47	8.4	7.9	6.4
25	13	91	100	27	144	914	230	180	61	8.4	6.2	6.6
26	9.6	71	86	33	127	1130	189	245	38	9.6	5.7	6.0
27	7.3	62	82	32	107	707	162	224	32	10	4.8	5.4
28	6.2	392	84	29	64	530	136	187	28	9.6	4.8	4.9
29	6.2	375	71	30	67	403	114	219	23	8.4	4.8	4.5
30	6.2	212	57	32	---	293	117	189	20	7.3	4.3	4.2
31	7.0	---	50	29	---	230	---	152	---	6.2	3.9	---
TOTAL	252.2	2560.1	9805	1034	8792	14757	5940	3904	1509	588.5	460.5	200.7
MEAN	8.14	85.3	316	33.4	303	476	198	126	50.3	19.0	14.9	6.69
MAX	35	392	1480	51	1090	1610	364	243	127	72	63	11
MIN	1.7	6.2	50	20	27	56	98	52	20	6.2	3.9	3.9
CFSM	.06	.58	2.16	.23	2.08	3.26	1.36	.86	.35	.13	.10	.05
IN.	.06	.65	2.50	.26	2.24	3.76	1.51	.99	.38	.15	.12	.05

CAL YR 1983 TOTAL 42871.0 MEAN 117 MAX 1910 MIN 1.3 CFSM .80 IN 10.92
WTR YR 1984 TOTAL 49803.0 MEAN 136 MAX 1610 MIN 1.7 CFSM .93 IN 12.69

03333600 KOKOMO CREEK NEAR KOKOMO, IN

LOCATION.--Lat 40°26'28", long 86°05'20", in NW¼SW¼ sec.16, T.23 N., R.4 E., Howard County, Hydrologic Unit 05120107, on left bank at upstream side of bridge on County Road 200 East, 2.6 miles southeast of intersection of U.S. Highways 31 and 35 in Kokomo, and 4.2 miles upstream from mouth.

DRAINAGE AREA.--24.7 mi².

PERIOD OF RECORD.--July 1959 to current year.

REVISED RECORDS.--WSP 2109: Drainage area. WDR IN-72-1: 1970-71(P).

GAGE.--Water-stage recorder. Datum of gage is 807.68 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--25 years, 21.7 ft³/s, 11.93 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,040 ft³/s Apr. 20, 1964, gage height, 9.88 ft; minimum daily, 0.08 ft³/s Aug. 20, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 260 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 12	0200	294	4.59	Mar. 20	1715	*331	*5.08
Feb. 11	2145	263	4.44	Mar. 25	1845	292	4.70
Mar. 16	1730	288	4.66				

Minimum daily discharge, 0.20 ft³/s Oct. 2,3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.24	1.3	8.2	7.6	3.4	12	25	13	24	3.6	2.3	3.2
2	.20	1.8	6.7	7.2	4.1	12	22	13	21	3.4	2.5	2.0
3	.20	1.6	5.5	7.2	19	13	22	13	17	3.9	4.5	1.9
4	.24	1.4	13	7.6	24	12	30	13	15	5.0	4.5	2.0
5	1.2	1.3	22	7.2	18	15	63	11	14	4.8	3.9	1.9
6	.89	1.2	114	7.2	11	16	48	9.9	13	7.2	4.3	2.0
7	.62	1.2	77	5.8	7.9	17	36	9.9	11	9.6	3.2	2.2
8	.71	1.3	46	5.5	6.1	14	29	8.9	11	6.1	3.0	3.6
9	.80	5.8	35	5.3	6.4	14	25	8.5	9.9	4.8	2.9	2.5
10	.89	11	29	5.0	41	13	21	7.6	9.2	4.3	2.5	2.3
11	.89	22	119	4.8	185	12	18	8.5	8.5	3.9	2.2	2.0
12	1.0	17	244	4.3	237	10	17	13	8.2	3.6	2.0	1.9
13	1.9	12	131	4.3	234	11	17	12	8.9	3.2	1.9	2.2
14	1.4	8.9	97	4.3	126	9.9	17	9.9	11	2.9	1.7	2.2
15	1.1	8.9	77	4.1	81	16	43	8.5	8.9	2.7	3.2	2.2
16	.89	10	50	4.1	66	247	55	7.6	7.9	2.5	2.5	2.0
17	.80	9.9	38	4.3	57	192	45	7.2	7.9	3.0	2.5	1.9
18	.99	9.9	30	3.9	51	107	42	7.2	7.2	3.2	2.5	1.6
19	1.2	9.6	25	3.4	53	81	37	7.6	6.4	2.3	2.2	1.5
20	3.0	9.2	21	3.0	43	249	30	63	5.8	2.9	2.7	1.5
21	3.2	8.2	20	2.5	36	215	25	89	5.5	3.0	3.9	1.5
22	9.9	7.2	40	2.7	31	139	50	61	5.5	2.7	2.5	1.5
23	3.5	9.2	29	3.0	27	119	57	73	5.8	2.2	2.2	1.5
24	1.9	11	19	3.6	24	119	45	49	7.2	2.3	2.0	2.5
25	1.9	11	16	4.3	20	190	36	39	5.8	2.9	1.9	1.7
26	1.5	10	15	4.5	17	187	30	86	5.3	3.6	1.9	1.7
27	1.4	13	13	4.8	14	104	25	50	5.5	3.6	2.2	1.9
28	1.3	32	13	4.1	8.5	75	20	40	4.8	2.9	2.0	1.7
29	1.2	22	9.6	4.1	9.6	50	18	39	4.3	2.5	2.0	1.6
30	1.1	13	7.9	3.9	---	37	19	33	3.9	2.3	1.9	1.5
31	1.2	---	7.2	3.4	---	30	---	27	---	2.3	1.7	---
TOTAL	47.26	281.9	1378.1	147.0	1461.0	2337.9	967	838.3	279.4	113.2	81.2	59.7
MEAN	1.52	9.40	44.5	4.74	50.4	75.4	32.2	27.0	9.31	3.65	2.62	1.99
MAX	9.9	32	244	7.6	237	249	63	89	24	9.6	4.5	3.6
MIN	.20	1.2	5.5	2.5	3.4	9.9	17	7.2	3.9	2.2	1.7	1.5
CFSM	.06	.38	1.80	.19	2.04	3.05	1.30	1.09	.38	.15	.11	.08
IN.	.07	.42	2.08	.22	2.20	3.52	1.46	1.26	.42	.17	.12	.09

CAL YR 1983 TOTAL 7116.20 MEAN 19.5 MAX 571 MIN .16 CFSM .79 IN 10.72
WTR YR 1984 TOTAL 7991.96 MEAN 21.8 MAX 249 MIN .20 CFSM .88 IN 12.04

03333700 WILDCAT CREEK AT KOKOMO, IN

LOCATION.--Lat 40°28'24", long 86°09'26", in NE¼NW¼ sec.2, T.23 N., R.3 E., Howard County, Hydrologic Unit 05120107, on right bank on property of Penn-Dixie Steel Corporation in Kokomo, 0.5 mile downstream from Kokomo Creek, 0.4 mile upstream from Dixon Road bridge, and at mile 62.5.

DRAINAGE AREA.--242 mi².

PERIOD OF RECORD.--October 1955 to current year.

REVISED RECORDS.--WSP 2109: Drainage area. WRD-IN-83: 1980, 1981, (p), 1982.

GAGE.--Water-stage recorder. Datum of gage is 775.62 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good. Some regulation of Kokomo Reservoirs No. 1 and No. 2, combined capacity, 4,170 acre-ft, for municipal water supply and by Kokomo Sewage Treatment Plant.

AVERAGE DISCHARGE.--29 years, 229 ft³/s, 12.85 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,100 ft³/s Feb. 10, 1959; maximum gage height, 12.5 ft (from graph) June 3, 1980; minimum daily discharge, 7.2 ft³/s Sept. 30, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,770 ft³/s Mar. 21, gage height, 7.49 ft; minimum daily, 21 ft³/s Oct. 10, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	26	222	87	48	122	363	199	250	57	31	26
2	24	36	174	86	68	134	312	175	210	58	32	47
3	24	32	146	85	148	134	315	164	186	78	46	50
4	30	27	212	87	327	130	338	172	160	89	78	31
5	50	24	341	84	293	153	589	160	140	69	38	34
6	27	23	923	85	188	156	665	139	129	128	35	29
7	23	24	1130	77	122	159	507	120	115	82	42	29
8	23	26	782	67	99	163	370	110	108	72	40	27
9	22	25	519	66	91	139	311	108	99	73	34	76
10	21	140	378	65	247	137	273	111	91	66	37	36
11	25	153	823	59	1140	126	223	128	87	60	32	34
12	26	76	1690	53	1730	109	222	149	86	58	31	30
13	53	159	1820	53	1820	113	213	211	173	59	35	31
14	35	129	1140	51	1500	104	223	193	130	54	36	28
15	24	119	918	46	1010	136	305	154	103	50	36	30
16	21	102	676	47	776	1120	465	131	94	49	39	28
17	23	107	459	48	668	2050	523	118	87	62	38	30
18	27	104	336	48	608	1420	484	110	84	51	34	30
19	23	94	259	44	588	1010	427	128	81	44	31	27
20	58	81	222	42	548	1670	357	504	79	56	31	27
21	40	72	209	37	455	2600	310	643	75	44	31	27
22	246	67	327	34	367	1740	451	561	73	40	85	26
23	53	84	354	36	315	1270	641	623	72	38	39	32
24	40	68	207	46	275	1230	584	517	82	50	36	28
25	33	109	177	51	238	1420	450	443	71	41	30	67
26	30	104	148	56	213	1840	355	750	71	58	30	38
27	28	153	142	54	216	1270	320	541	76	45	31	33
28	29	327	144	52	147	954	271	440	70	35	37	31
29	26	540	127	53	107	741	239	392	67	32	33	29
30	23	344	92	55	---	576	193	365	62	31	31	26
31	26	---	84	51	---	444	---	298	---	32	31	---
TOTAL	1156	3375	15181	1805	14352	23370	11299	8857	3211	1761	1170	1017
MEAN	37.3	113	490	58.2	495	754	377	286	107	56.8	37.7	33.9
MAX	246	540	1820	87	1820	2600	665	750	250	128	85	76
MIN	21	23	84	34	48	104	193	108	62	31	30	26
CFSM	.15	.47	2.03	.24	2.05	3.12	1.56	1.18	.44	.24	.16	.14
IN.	.18	.52	2.33	.28	2.21	3.59	1.74	1.36	.49	.27	.18	.16

CAL YR 1983 TOTAL 77917 MEAN 213 MAX 3880 MIN 17 CFSM .88 IN 11.98
WTR YR 1984 TOTAL 86554 MEAN 236 MAX 2600 MIN 21 CFSM .98 IN 13.30

03334500 SOUTH FORK WILDCAT CREEK NEAR LAFAYETTE, IN

LOCATION.--Lat 40°25'04", long 86°46'05", in SW¼SW¼ sec.21, T.23 N., R.3 W., Tippecanoe County, Hydrologic Unit 05120107, on right bank 40 ft upstream from bridge on State Highway 26 , 0.5 mile upstream from Middle Fork, 4.4 miles upstream from mouth, and 5 miles east of Lafayette.

DRAINAGE AREA.--243 mi².

PERIOD OF RECORD.--October 1943 to current year. Prior to March 1944 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1948(M). WSP 1505: 1947. WSP 1725: 1951-53(M), 1955(M). WSP 1909: 1955(P). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 566.60 ft National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark). Prior to July 29, 1954, nonrecording gage at site 40 ft downstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--41 years, 240 ft³/s, 13.41 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,100 ft³/s May 2, 1983, gage height, 15.68 ft, from rating curve extended above 6,000 ft³/s on basis of contracted-opening measurement at 16.8 ft; minimum daily, 15 ft³/s Sept. 19, 22, 1944, Aug. 30, 31, Sept. 1, 14, 15, 1969.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1943 reached a stage of 16.8 ft, from floodmarks, discharge, 17,900 ft³/s by contracted-opening measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 13	0200	2940	7.95
Feb. 13	1000	----	*a8.38

[a] Backwater

Minimum daily discharge, 26 ft³/s Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	37	138	108	71	175	378	243	265	99	48	40
2	27	39	112	108	72	166	343	218	234	91	48	39
3	27	41	103	108	103	162	331	213	207	84	51	52
4	26	41	134	109	262	178	369	231	188	106	48	52
5	29	39	221	109	259	194	575	213	171	114	218	47
6	35	37	562	104	175	194	546	200	159	100	144	45
7	32	37	845	99	138	186	412	190	148	108	95	42
8	29	36	537	93	120	173	350	182	140	94	88	39
9	30	35	375	87	110	163	318	175	130	81	104	39
10	30	38	293	83	128	158	290	171	119	76	73	50
11	29	54	658	78	1050	155	265	167	110	75	182	54
12	31	96	1650	73	1970	153	253	209	107	77	243	48
13	31	99	1200	69	2490	150	271	224	106	70	130	43
14	33	79	855	66	1640	156	249	207	325	65	88	42
15	35	69	755	63	1080	167	256	184	192	63	71	46
16	32	69	500	62	780	1890	328	169	138	61	61	44
17	31	73	362	62	654	2010	471	161	115	58	60	39
18	31	76	287	62	579	1350	500	155	106	56	67	38
19	32	74	207	59	533	985	450	151	98	54	65	37
20	40	69	170	56	467	1650	390	200	91	57	50	35
21	55	69	152	54	406	1820	347	365	87	65	47	34
22	117	65	204	54	362	1400	583	365	100	58	48	32
23	155	64	175	59	331	1130	750	419	281	53	48	34
24	95	65	163	66	303	1170	546	428	700	53	45	38
25	70	63	150	74	271	1320	444	353	492	56	42	42
26	58	62	140	78	237	1550	390	1060	275	62	40	62
27	51	65	130	82	218	1180	353	612	211	67	39	62
28	47	155	124	83	194	910	312	441	169	65	42	53
29	42	290	118	77	182	671	275	406	128	58	65	47
30	40	186	113	74	---	500	275	359	108	54	54	45
31	39	---	110	74	---	422	---	306	---	49	45	---
TOTAL	1387	2222	11543	2433	15185	22488	11620	8977	5700	2229	2449	1320
MEAN	44.7	74.1	372	78.5	524	725	387	290	190	71.9	79.0	44.0
MAX	155	290	1650	109	2490	2010	750	1060	700	114	243	62
MIN	26	35	103	54	71	150	249	151	87	49	39	32
CFSM	.18	.31	1.53	.32	2.16	2.98	1.59	1.19	.78	.30	.33	.18
IN.	.21	.34	1.77	.37	2.32	3.44	1.78	1.37	.87	.34	.37	.20

CAL YR 1983 TOTAL 84263 MEAN 231 MAX 11000 MIN 26 CFSM .95 IN 12.90
WTR YR 1984 TOTAL 87553 MEAN 239 MAX 2490 MIN 26 CFSM .98 IN 13.40

03335000 WILDCAT CREEK NEAR LAFAYETTE, IN

LOCATION.--Lat 40°26'26", long 86°49'45", in SW¼NW¼ sec.13, T.23 N., R.4 W., Tippecanoe County, Hydrologic Unit 05120107, on right bank about 200 ft downstream of bridge on County Road 2A East, 2.8 miles downstream from South Fork Wildcat Creek, 3.7 miles northeast of courthouse in Lafayette, and 4.8 miles upstream from mouth.

DRAINAGE AREA.--794 mi².

PERIOD OF RECORD.--May 1954 to current year.

REVISED RECORDS.--WSP 1555: 1955, 1957(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 527.66 ft National Geodetic Vertical Datum of 1929 (Indiana Flood Control and Water Resources Commission bench mark). Nonrecording gage prior to June 13, 1957, and August 31, 1974, to May 20, 1976, at present site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--30 years, 766 ft³/s, 13.10 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s June 10, 1958, gage height, 21.52 ft, from rating curve extended above 18,000 ft³/s; minimum daily, 46 ft³/s Sept. 28, 29, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1913 reached a stage of about 25.4 ft, from profile by State of Indiana, Department of Natural Resources.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 6,300 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 13	1500	*7740	*12.60

Minimum daily discharge, 95 ft³/s Sept. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127	159	752	350	196	464	1320	708	979	280	138	114
2	125	160	575	350	190	448	1140	634	849	262	136	111
3	123	165	489	350	260	440	1020	602	735	248	143	134
4	121	166	479	350	475	457	1100	606	644	278	148	145
5	123	171	740	350	880	473	1520	597	575	338	406	148
6	130	171	1430	340	710	492	1820	555	520	380	390	127
7	154	166	2500	310	410	499	1540	509	479	415	248	119
8	142	161	2180	280	350	472	1230	475	448	345	220	112
9	135	159	1590	270	310	455	1030	447	422	280	221	108
10	132	160	1210	260	480	436	908	425	387	255	185	115
11	128	171	1750	240	2210	414	803	421	359	244	251	163
12	128	504	4160	220	4920	404	728	472	346	236	398	134
13	128	417	3970	210	7430	393	760	539	335	214	256	120
14	131	357	3660	200	5800	393	726	531	586	204	189	115
15	163	370	2950	190	4080	418	737	505	591	199	164	115
16	157	350	2120	190	2900	4120	1050	450	402	192	149	114
17	143	340	1590	200	2380	5340	1570	413	353	190	148	108
18	139	340	1250	190	2090	4670	1640	393	321	185	160	106
19	136	340	977	180	1910	3590	1520	387	294	187	164	103
20	143	333	720	160	1720	4410	1300	735	276	189	138	102
21	168	317	650	150	1520	5350	1110	1570	259	194	128	99
22	386	290	801	140	1320	5300	1570	1680	269	192	138	96
23	577	270	740	150	1150	4450	2170	1980	418	174	141	95
24	397	265	695	190	1010	3790	1870	1810	1070	175	175	97
25	285	269	660	200	878	3990	1560	1460	1020	182	136	104
26	230	272	620	210	755	3120	1310	3600	586	184	124	134
27	203	310	580	215	682	4400	1130	2700	465	191	119	165
28	184	457	560	212	580	3270	982	1850	410	189	128	153
29	173	1020	470	208	505	2470	849	1590	344	168	154	130
30	167	969	400	204	---	1930	817	1360	304	153	155	123
31	163	---	360	200	---	1560	---	1160	---	143	129	---
TOTAL	5641	9599	41608	7269	48101	70418	36830	31164	15046	7064	5779	3609
MEAN	182	320	1342	234	1659	2272	1228	1005	502	228	186	120
MAX	577	1020	4160	350	7430	5350	2170	3600	1070	415	406	165
MIN	121	159	360	140	190	393	726	387	259	143	119	95
CFSM	.23	.40	1.69	.30	2.09	2.86	1.55	1.27	.63	.29	.23	.15
IN.	.26	.45	1.95	.34	2.25	3.30	1.73	1.46	.70	.33	.27	.17

CAL YR 1983 TOTAL 278251 MEAN 762 MAX 17800 MIN 100 CFSM .96 IN 13.04
WTR YR 1984 TOTAL 282128 MEAN 771 MAX 7430 MIN 95 CFSM .97 IN 13.22

03335500 WABASH RIVER AT LAFAYETTE, IN

LOCATION.--Lat 40°25'19", long 86°53'49", in NE¼SW¼ sec.20, T.23 N., R.4 W., Tippecanoe County, Hydrologic Unit 05120108, on right bank 20 ft downstream from Brown Street in Lafayette, 0.2 mile upstream from Main Street bridge, 0.3 mile downstream from Harrison Memorial Bridge, 5.1 miles downstream from Wildcat Creek, and at mile 311.9.

DRAINAGE AREA.--7,267 mi².

PERIOD OF RECORD.--February 1901 to January 1902, March to December 1902, January to May 1903 (gage heights only), October 1923 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at present site since October 1913 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1335: 1929, 1932-33, 1936. WSP 1505: 1950. WSP 1555: 1928(M). WSP 2109: Drainage area. WDR IN-81-1: 1979.

GAGE.--Water-stage recorder. Datum of gage is 504.14 ft National Geodetic Vertical Datum of 1929. Prior to May 2, 1903, nonrecording gage 0.5 mile upstream at different datum. Oct. 7, 1923, to Nov. 20, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow partially regulated by upstream reservoirs and power development.

AVERAGE DISCHARGE.--61 years (1923 to current year), 6,471 ft³/s, 12.09 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 131,000 ft³/s May 19, 1943, gage height, 28.47 ft; minimum daily, 399 ft³/s Sept. 26, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 32.9 ft, from floodmark determined by National Weather Service, discharge, 190,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 40,400 ft³/s Feb. 14, gage height, 18.30 ft; minimum daily, 952 ft³/s Sept. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1220	2450	9660	3300	2180	4810	20000	7970	13300	3200	2270	1010
2	1250	2480	9110	3150	2330	4500	18700	6510	10700	2900	2150	999
3	1180	2610	8040	3040	2850	4540	17700	6220	8900	2750	2400	1590
4	1220	2570	7120	3000	4080	4450	15700	6320	8110	2650	2190	1760
5	1260	2320	6080	3150	5700	4350	14500	6330	7120	2650	2530	1360
6	1290	2330	7050	3130	7510	4340	15800	6190	5800	2600	3270	1240
7	1370	2310	17800	2970	6800	4210	17200	5730	5200	3200	2940	1290
8	1390	2280	18800	2880	6580	4300	18200	5380	4900	4200	2930	1190
9	1320	1800	15900	2740	4880	4540	18200	4990	4600	5800	2280	1350
10	1300	1570	14700	2660	4390	4380	16800	4810	4400	5000	2240	1400
11	1330	2400	13300	2600	8410	3970	14700	4690	4000	4300	2120	1430
12	1520	3070	20100	2590	21800	3840	12500	4610	3700	3500	2320	1490
13	1490	3290	25900	2410	39000	3860	11700	4640	3400	2900	2460	1430
14	1390	3880	23400	2170	40000	3630	10100	4590	3500	2500	2280	1310
15	1610	4140	21100	2240	34700	3630	8670	4710	3800	2350	2190	1180
16	2210	4140	18500	2300	27500	13300	9220	4610	4100	2200	1670	1120
17	2200	3430	15900	2130	25300	30300	12400	4120	3900	2000	1700	2110
18	2090	3420	14200	2080	24200	29500	14500	4020	4000	1990	1650	2890
19	1530	3580	11800	2080	22100	24800	13700	3860	3900	1960	1630	2840
20	1230	3170	10500	1980	19300	23600	13100	5390	3600	1990	1390	2810
21	2330	2950	10200	1850	17900	33200	11600	14300	3300	2040	1350	2290
22	4090	3070	9870	1770	16300	32900	11400	18200	3100	1900	1490	1160
23	5010	4500	9250	1780	15400	30400	16100	18300	2900	1980	1700	1110
24	4210	4690	7620	1840	13700	27700	17300	17400	3500	1800	1530	999
25	3700	4810	5520	1920	10100	27400	15700	15400	4000	2100	1380	952
26	3610	5150	4070	1990	7000	34700	15800	25000	4700	2400	1320	1550
27	3390	5750	3590	2050	6310	34300	14100	31800	4200	3900	1330	1600
28	3420	7120	3500	2070	6210	28300	14400	25500	4500	3360	1730	1530
29	3220	9370	3480	2030	5660	24800	11700	20500	4200	3310	1430	1550
30	2800	10000	3440	2110	---	23700	10200	18400	3600	2950	1300	1610
31	2440	---	3390	2140	---	22200	---	15700	---	2770	1190	---
TOTAL	67620	114650	352890	74150	408190	504450	431690	326190	148930	89150	60360	46150
MEAN	2181	3822	11380	2392	14080	16270	14390	10520	4964	2876	1947	1538
MAX	5010	10000	25900	3300	40000	34700	20000	31800	13300	5800	3270	2890
MIN	1180	1570	3390	1770	2180	3630	8670	3860	2900	1800	1190	952
CFSM	.30	.53	1.57	.33	1.94	2.24	1.98	1.45	.68	.40	.27	.21
IN.	.35	.59	1.81	.38	2.09	2.58	2.21	1.67	.76	.46	.31	.24

CAL YR 1983 TOTAL 2215617 MEAN 6070 MAX 59100 MIN 732 CFSM .84 IN 11.34
WTR YR 1984 TOTAL 2624420 MEAN 7171 MAX 40000 MIN 952 CFSM .99 IN 13.43

03335690 MUD PINE CREEK NEAR OXFORD, IN

LOCATION.--Lat 40°31'24", long 87°20'30", in NE¼SE¼ sec.17, T.24 N., R.8 W., Benton County, Hydrologic Unit 05120108, on right bank 5 ft downstream from county road bridge, 0.3 mile north of Chase, 2 miles east of Boswell, and 5 miles west of Oxford.

DRAINAGE AREA.--39.4 mi².

PERIOD OF RECORD.--June 1971 to current year.

REVISED RECORD.--WDR IN-80-1: 1971-79 (P).

GAGE.--Water-stage recorder. Datum of gage is 718.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods and period of no gage-height record, which are fair.

AVERAGE DISCHARGE.--13 years (1972 to current year), 40.3 ft³/s, 13.89 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,420 ft³/s June 2, 1980, gage height, 11.67 ft; minimum daily, 0.16 ft³/s Sept. 14, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
May 20	1800	1300	9.41
May 26	0215	*2230	*10.62

Minimum daily discharge, 0.27 ft³/s Oct. 3.

NOTE.--No gage-height record Aug. 1 to Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.35	1.6	9.3	12	7.7	24	61	32	79	7.8	2.6	.86
2	.28	2.0	7.9	12	7.6	26	52	31	68	7.5	2.4	.82
3	.27	2.6	7.1	12	11	29	53	32	55	7.1	2.2	.92
4	.48	2.0	11	13	16	29	61	45	49	7.7	2.4	1.2
5	.49	1.7	18	13	23	29	87	48	43	7.7	2.2	1.1
6	.37	1.9	81	13	22	27	66	47	37	7.0	2.1	1.0
7	.33	1.7	49	13	20	25	51	42	31	6.3	1.9	.94
8	.48	1.7	33	12	19	23	45	37	28	5.2	1.8	.84
9	.56	1.7	26	11	17	22	40	34	24	5.0	1.9	.78
10	.71	3.9	22	11	30	20	35	30	22	4.8	2.1	1.3
11	.71	8.1	185	10	244	19	33	31	19	4.7	1.9	1.2
12	.99	4.2	234	10	384	18	34	28	19	5.0	1.7	1.1
13	1.3	3.0	142	9.8	465	17	43	27	18	4.7	1.6	1.0
14	1.1	2.6	180	9.3	204	16	38	24	17	4.0	1.5	.96
15	1.1	2.8	147	9.0	146	39	38	22	16	3.5	1.4	.91
16	.92	3.2	87	8.6	122	232	54	21	15	3.4	1.3	.86
17	.89	3.0	64	8.2	112	153	74	21	15	3.2	1.2	.81
18	.89	2.8	51	7.8	104	101	76	21	14	3.1	1.5	.78
19	.99	2.8	43	7.6	114	87	64	21	12	3.0	1.4	.75
20	1.6	3.4	37	7.4	91	356	53	618	11	3.7	1.3	.72
21	4.2	4.2	31	7.2	78	209	48	335	11	3.9	1.2	.69
22	38	3.2	25	7.2	68	165	147	194	11	3.2	1.2	.68
23	8.5	3.7	20	7.3	57	166	115	157	11	3.0	1.1	.67
24	3.9	5.6	17	7.5	47	152	91	118	14	3.0	1.0	.71
25	2.6	3.9	15	7.7	39	392	73	274	11	3.0	.98	.75
26	2.0	3.4	14	7.9	35	214	61	969	11	3.7	.94	.81
27	1.9	7.4	13	8.2	33	161	53	201	11	5.6	.90	.87
28	1.9	45	13	8.4	23	139	43	151	9.7	3.3	1.1	.89
29	1.7	19	12	8.4	20	100	41	133	8.8	3.0	1.0	.88
30	1.6	13	12	8.3	---	79	41	108	8.0	2.9	.98	.87
31	1.7	---	12	8.0	---	70	---	90	---	2.8	.92	---
TOTAL	82.81	165.1	1618.3	295.8	2559.3	3139	1771	3942	698.5	141.8	47.72	26.67
MEAN	2.67	5.50	52.2	9.54	88.3	101	59.0	127	23.3	4.57	1.54	.89
MAX	38	45	234	13	465	392	147	969	79	7.8	2.6	1.3
MIN	.27	1.6	7.1	7.2	7.6	16	33	21	8.0	2.8	.90	.67
CFSM	.07	.14	1.33	.24	2.24	2.56	1.50	3.22	.59	.12	.04	.02
IN.	.08	.16	1.53	.28	2.42	2.96	1.67	3.72	.66	.13	.05	.03

CAL YR 1983 TOTAL 10790.35 MEAN 29.6 MAX 750 MIN .16 CFSM .75 IN 10.19
WTR YR 1984 TOTAL 14488.00 MEAN 39.6 MAX 969 MIN .27 CFSM 1.01 IN 13.68

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03335700 BIG PINE CREEK NEAR WILLIAMSPORT, IN

LOCATION.--Lat 40°19'03", long 87°17'26", in SW¼SE¼ sec.26, T.22 N., R.8 W., Warren County, Hydrologic Unit 05120108, on downstream side of county road bridge, 1.6 miles north of city limits of Williamsport, and 3.7 miles upstream from mouth.

DRAINAGE AREA.--323 mi².

PERIOD OF RECORD.--October 1955 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 511.68 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to May 19, 1967, nonrecording gage and crest-stage gage at same site and datum.

REMARKS.--Records good except those for winter periods which are fair.

AVERAGE DISCHARGE.--29 years, 272 ft³/s, 11.44 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,600 ft³/s Feb. 10, 1959, from rating curve extended above 8,000 ft³/s on basis of contracted-opening measurement, gage height, 16.00 ft, from floodmark; minimum daily, 6.5 ft³/s Oct. 6-8, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 13	0500	3440	9.27	May 26	0100	*5170	*10.97
Mar. 20	0400	3110	8.89				

Minimum daily discharge, 7.4 ft³/s Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.8	24	130	138	85	182	553	295	531	86	34	12
2	8.4	27	110	140	120	192	494	278	441	84	30	12
3	7.8	31	98	141	160	220	496	278	388	84	26	15
4	7.4	28	156	142	250	265	557	304	346	95	30	17
5	8.2	28	189	143	250	310	732	341	322	88	28	15
6	7.7	27	548	140	230	273	673	346	291	90	26	14
7	7.7	26	541	131	210	240	546	322	265	84	24	13
8	8.5	24	388	126	195	235	467	295	249	82	24	12
9	9.3	23	296	119	178	210	433	274	230	79	25	19
10	8.9	37	254	112	215	195	395	257	211	76	28	20
11	9.1	73	1180	108	1000	178	363	257	196	74	28	19
12	14	68	1580	101	2230	175	362	257	185	72	21	17
13	15	55	1320	95	3040	175	441	230	189	69	20	15
14	14	43	1340	90	2400	191	433	219	204	65	19	14
15	15	41	1230	85	1570	244	409	204	175	61	18	14
16	14	43	839	82	1160	1440	503	196	165	58	17	13
17	14	40	634	82	939	1270	698	192	158	54	17	13
18	13	39	500	82	835	942	707	189	158	48	19	13
19	12	38	410	79	832	735	630	189	146	43	19	12
20	21	41	340	77	735	2410	538	1200	131	55	18	12
21	38	44	280	75	637	2050	478	2370	125	67	17	11
22	414	44	235	73	559	1610	1450	1940	128	55	17	11
23	201	50	220	74	497	1330	1370	1830	131	48	16	10
24	104	62	190	80	446	1200	1120	1320	128	41	16	11
25	67	56	178	88	391	2030	757	1260	158	38	15	11
26	50	50	165	98	344	2060	565	4560	125	38	15	12
27	36	85	152	99	326	1610	456	2830	115	40	14	13
28	30	351	142	96	225	1270	393	1790	104	47	16	13
29	27	275	138	94	184	983	346	1320	97	53	15	12
30	24	183	138	91	---	733	341	884	88	50	14	12
31	24	---	138	88	---	623	---	669	---	41	13	---
TOTAL	1238.8	1956	14059	3169	20243	25581	17706	26896	6180	1965	641	407
MEAN	40.0	65.2	454	102	698	825	590	868	206	63.4	20.7	13.6
MAX	414	351	1580	143	3040	2410	1450	4560	531	95	34	20
MIN	7.4	23	98	73	85	175	341	189	88	38	13	10
CFSM	.12	.20	1.41	.32	2.16	2.55	1.83	2.69	.64	.20	.06	.04
IN.	.14	.23	1.62	.36	2.33	2.95	2.04	3.10	.71	.23	.07	.05

CAL YR 1983 TOTAL 97239.7 MEAN 266 MAX 6380 MIN 7.4 CFSM .82 IN 11.20
WTR YR 1984 TOTAL 120041.8 MEAN 328 MAX 4560 MIN 7.4 CFSM 1.02 IN 13.83

03336000 WABASH RIVER AT COVINGTON, IN

LOCATION.--Lat 40°08'24", long 87°24'24", in NE¼NW¼ sec.35, T.20 N., R.9 W., Warren County, Hydrologic Unit 05120108, on right approach to old U.S. Highway 136 bridge at Covington, 2.9 miles downstream from Opossum Run, 3.6 miles upstream from Spring Creek, and at mile 271.1.

DRAINAGE AREA.--8,218 mi².

PERIOD OF RECORD.--October 1939 to current year. Gage-height records collected at site 0.4 mile downstream January 1927 to December 1930, and at present site since January 1931 are contained in reports of National Weather Service.

REVISED RECORDS.--WDR IN-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 473.97 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1979, nonrecording gage on old bridge.

REMARKS.--Records good. Flow partially regulated by upstream reservoirs and power development.

AVERAGE DISCHARGE.--45 years, 7,396 ft³/s, 12.22 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 147,000 ft³/s May 20, 1943, gage height, 32.44 ft; minimum daily, 487 ft³/s Sept. 29, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 35.1 ft, from floodmark determined by National Weather Service, discharge, 200,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 41,700 ft³/s Feb. 15, gage height, 23.13 ft; minimum daily, 1,350 ft³/s Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1390	2480	10600	5000	2800	7110	23000	11700	20400	4080	3330	1590
2	1390	2510	10200	5200	2900	6400	21000	9330	16100	3940	2800	1440
3	1410	2550	9650	5200	4000	6060	20000	8190	12900	3560	2580	1470
4	1350	2610	8690	5000	5000	6040	20900	8010	10200	3360	3080	1870
5	1370	2550	7980	4700	6500	5730	19300	8200	9000	3350	2680	2000
6	1390	2390	7810	4700	7500	5660	19000	8090	7840	3270	3050	1710
7	1410	2400	11300	4700	7600	5560	19300	7800	7010	3750	3480	1660
8	1450	2390	18200	4700	7000	5310	20100	7290	6380	5060	3310	1670
9	1460	2320	18800	4500	5800	5340	20600	6830	5970	7350	3210	1670
10	1420	1970	16700	4400	6000	5560	20300	6430	5660	6960	2620	1730
11	1420	1860	17200	4200	10000	5480	18700	6140	5060	5780	2580	1770
12	1470	2570	20100	4000	15900	5030	16200	6180	4870	4320	2500	1760
13	1570	3120	23900	3900	24300	4880	14800	5970	4370	3650	2590	1820
14	1570	3500	26700	3700	31900	4980	13400	5930	4410	3300	2730	1750
15	1510	3950	27400	3500	40200	4720	11800	5910	4720	3050	2540	1650
16	1680	4310	26000	3400	39000	10300	10800	5940	5230	2860	2380	1580
17	2130	4150	22800	3400	33600	21800	12900	5610	5000	2570	2040	1550
18	2120	3610	19000	3200	30300	27700	16000	5300	5100	2540	2030	2380
19	2030	3710	15500	3000	28300	30200	16600	5000	5000	2470	1950	2990
20	1710	3620	13100	2800	26100	30500	15800	5780	4550	2500	1920	2980
21	1520	3340	12700	2700	23400	30900	14800	12100	4160	2570	1780	2970
22	3170	3130	12000	2700	21200	33100	17100	20100	3920	2400	1760	2450
23	4710	3390	10900	2700	19000	34400	19400	22600	3710	2470	1920	1650
24	5070	4820	9650	2700	17400	33000	21600	23000	4100	2260	1970	1540
25	4180	4970	6500	2700	14900	32200	21100	21600	5040	2320	1840	1440
26	3540	5140	4600	2800	11000	35000	19700	24300	5910	3070	1700	1390
27	3450	5750	4600	2900	8890	36000	18300	29200	5450	3170	1680	1810
28	3090	7130	4800	3000	8060	35000	17100	32700	5780	4540	1710	1900
29	3020	8710	4900	3000	7780	32000	16000	31700	5600	4050	1960	1850
30	2800	10400	4900	3000	---	28000	13500	28000	4850	3910	1770	1880
31	2470	---	4900	2900	---	25000	---	24200	---	3520	1640	---
TOTAL	68270	115350	412080	114300	466330	558960	529100	409130	198290	111980	73090	55920
MEAN	2202	3845	13290	3687	16080	18030	17640	13200	6610	3612	2358	1864
MAX	5070	10400	27400	5200	40200	36000	23000	32700	20400	7350	3480	2990
MIN	1350	1860	4600	2700	2800	4720	10800	5000	3710	2260	1640	1390
CFSM	.27	.47	1.62	.45	1.96	2.19	2.15	1.61	.80	.44	.29	.23
IN.	.31	.52	1.87	.52	2.11	2.53	2.40	1.85	.90	.51	.33	.25

CAL YR 1983 TOTAL 2584440 MEAN 7081 MAX 64100 MIN 1060 CFSM .86 IN 11.70
WTR YR 1984 TOTAL 3112800 MEAN 8505 MAX 40200 MIN 1350 CFSM 1.04 IN 14.09

03339000 VERMILION RIVER NEAR DANVILLE, IL

LOCATION.--Lat 40°06'03", long 87°35'52", in NW¼NW¼ sec.22, T.19 N., R.11 W., Vermilion County, Hydrologic Unit 05120109, on right bank at Danville sewage-treatment plant, 1.7 mi upstream from Stony Creek, 2.2 mi southeast of Danville, and at mile 19.5.

DRAINAGE AREA.--1,290 mi².

PERIOD OF RECORD.--October 1914 to September 1921, June 1928 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 853: 1936(M). WSP 973: 1939. WSP 1305: 1915-16, 1920, 1929. WSP 1335: 1934(M). WSP 1909: 1960. WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 503.33 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Jan. 9, 1935, nonrecording gage at site and datum. Jan. 9, 1935, to Aug. 30, 1952, at site 0.3 mi downstream at same datum.

REMARKS.--Water-discharge records good. Flow regulated at times by storage at Lake Vermilion on North Fork Vermilion River, 4.5 mi above station, usable capacity, 7,440 acre-ft, and by Danville sewage-treatment plant.

AVERAGE DISCHARGE.--63 years, 976 ft³/s, 10.27 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,700 ft³/s Mar. 13, 1939, gage height, 28.59 ft; minimum daily, 2 ft³/s Oct. 9-14, 1920, Aug. 10, 1930.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 12	1600	12400	16.25	Mar. 26	1100	11000	15.10
Feb. 14	0700	13400	17.00	Apr. 23	1100	8990	13.35
Mar. 17	1500	9270	13.60	May 22	1945	8490	12.90
Mar. 21	1300	*15400	*18.55	May 27	2100	13500	17.08

Minimum daily discharge, 16 ft³/s Aug. 31, Sept. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	213	1660	465	290	558	2340	1480	2500	264	99	17
2	82	234	1370	460	303	833	2200	1150	2080	222	86	16
3	76	224	1250	455	650	981	2140	1090	1840	211	66	28
4	57	207	1650	455	1920	1180	2720	1190	1500	444	80	23
5	45	181	3080	465	2680	1090	3370	1320	1320	710	79	40
6	39	143	4610	490	2040	1030	3540	1060	1210	671	122	24
7	39	124	5050	520	1340	951	2740	921	1110	430	69	17
8	46	117	3660	560	801	814	2200	880	1050	249	67	23
9	48	137	2340	620	568	640	1820	820	932	185	62	112
10	40	238	2560	680	1040	601	1660	752	1360	157	50	80
11	42	1050	4930	731	4070	584	1580	757	995	167	45	135
12	69	1090	11300	801	9990	558	1560	782	806	141	37	86
13	62	808	11100	651	12600	595	1740	751	730	127	48	74
14	181	645	9960	517	13000	751	1780	691	708	114	31	82
15	82	542	9610	502	10100	1720	1680	634	658	109	23	74
16	55	468	6660	623	5680	6010	1680	623	608	97	23	72
17	52	377	3770	517	4010	8940	1660	568	562	104	20	76
18	43	332	2740	444	3900	7420	1640	553	544	93	30	72
19	39	299	1800	568	3620	5630	1440	553	475	81	28	50
20	96	260	1400	553	3510	9610	1820	2120	370	99	24	45
21	130	440	1100	606	2940	14300	1580	7310	486	107	24	48
22	1800	776	860	697	2530	10700	4790	8160	961	115	46	55
23	3600	764	700	527	2030	6180	8340	7450	1970	91	35	57
24	2530	1820	560	477	1520	4730	6020	5340	1900	66	42	52
25	1240	1870	530	350	1580	7390	3880	3980	1680	73	35	62
26	921	1200	520	377	1410	10700	3000	8910	965	1120	22	63
27	814	1160	510	336	1250	9330	2340	12700	673	1570	19	55
28	558	2640	500	325	1100	6630	2090	11000	518	542	21	54
29	307	4380	490	378	709	4770	1920	5390	414	302	17	52
30	256	2760	480	356	---	3920	1770	3380	317	205	17	45
31	224	---	470	391	---	2920	---	3030	---	139	16	---
TOTAL	13663	25579	97220	15917	96581	132066	77040	95345	31242	9011	1383	1689
MEAN	441	853	3136	513	3330	4260	2568	3076	1041	291	44.6	56.3
MAX	3600	4380	11300	801	13000	14300	8340	12700	2500	1570	122	135
MIN	39	117	470	325	290	558	1440	553	317	66	16	16
CFSM	.34	.66	2.43	.40	2.58	3.30	1.99	2.38	.81	.23	.03	.04
IN.	.39	.74	2.80	.46	2.79	3.81	2.22	2.75	.90	.26	.04	.05

CAL YR 1983 TOTAL 516558 MEAN 1415 MAX 25400 MIN 39 CFSM 1.10 IN. 14.90
WTR YR 1984 TOTAL 596736 MEAN 1630 MAX 14300 MIN 16 CFSM 1.26 IN. 17.21

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03339108 EAST FORK COAL CREEK NEAR HILLSBORO, IN

LOCATION.--Lat 40°06'06", long 87°07'54", in NW¼SW¼ sec.8, T.19 N., R.6 W., Fountain County, Hydrologic Unit 05120108, at center pier on downstream side of bridge on County Road 700 East, 1.5 miles east of Hillsboro, 3.7 miles northwest of Waynetown, and 9.6 miles upstream from mouth.

DRAINAGE AREA.--33.4 mi².

PERIOD OF RECORD.--September 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 673.76 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for period of no gage-height record, which are poor.

AVERAGE DISCHARGE.--16 years, 38.0 ft³/s, 15.46 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,680 ft³/s May 1, 1983, gage height, 10.47 ft; minimum daily, 3.5 ft³/s Jan. 16, 17, Feb. 6, 7, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 22	0915	*748	*5.80

Minimum daily discharge, 4.5 ft³/s Oct. 1,2.

NOTE.--No gage-height record Nov. 16 to Dec. 14, Dec. 17 to Mar. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	6.3	10	15	7.8	14	32	33	27	10	11	6.7
2	4.5	7.6	9.2	14	10	14	29	32	25	10	10	14
3	4.8	8.1	8.8	14	22	15	41	31	23	11	16	24
4	6.3	7.6	20	14	45	15	68	36	21	33	68	10
5	11	7.0	50	14	25	15	153	33	20	24	39	9.6
6	5.9	6.8	110	14	18	14	66	31	19	15	21	8.4
7	5.5	6.4	70	14	14	13	43	31	18	13	15	7.8
8	4.8	6.4	45	14	13	12	37	28	18	12	13	7.1
9	5.9	6.6	32	13	12	11	33	26	17	12	12	8.5
10	5.5	8.6	26	12	35	11	30	25	17	11	11	8.5
11	5.5	11	220	12	80	10	27	26	16	21	10	8.9
12	6.3	8.6	170	11	240	10	30	28	16	14	10	7.8
13	6.7	7.6	110	10	190	11	33	25	15	11	9.5	7.4
14	6.7	7.6	75	9.8	130	15	29	24	21	10	8.7	8.4
15	5.9	7.1	50	9.2	95	40	27	23	17	10	8.5	8.6
16	5.5	8.6	30	8.6	80	366	43	21	16	9.5	8.0	8.0
17	5.5	8.2	27	8.2	68	166	64	21	16	9.1	8.3	7.6
18	6.3	7.5	23	8.0	62	112	64	21	15	9.1	8.8	7.6
19	6.7	6.8	21	7.7	56	85	48	21	13	8.6	8.0	7.5
20	12	6.8	19	7.6	45	327	39	29	12	17	7.5	7.1
21	11	6.5	21	7.4	38	144	95	33	11	12	6.9	6.9
22	43	6.4	25	7.6	32	140	423	30	11	10	11	6.7
23	12	6.3	25	8.4	28	131	166	47	19	9.1	7.9	8.3
24	8.1	7.4	22	9.0	25	105	114	33	15	8.6	7.1	8.1
25	6.7	6.7	20	12	21	269	79	34	12	8.6	6.9	13
26	6.3	6.6	19	12	18	144	58	131	12	118	6.7	15
27	6.3	6.6	20	11	15	95	47	53	13	31	7.4	9.9
28	5.9	32	19	10	15	69	40	43	12	21	21	9.4
29	5.9	20	18	9.2	15	49	38	40	11	15	9.6	9.0
30	5.9	12	17	8.0	—	40	40	34	11	13	7.8	8.6
31	6.3	—	15	7.7	—	34	—	31	—	11	7.0	—
TOTAL	243.2	261.7	1347.0	332.4	1454.8	2494	2036	1054	489	527.6	402.6	278.4
MEAN	7.85	8.72	43.5	10.7	50.2	80.5	67.9	34.0	16.3	17.0	13.0	9.28
MAX	43	32	220	15	240	366	423	131	27	118	68	24
MIN	4.5	6.3	8.8	7.4	7.8	10	27	21	11	8.6	6.7	6.7
CFSM	.24	.26	1.30	.32	1.50	2.41	2.03	1.02	.49	.51	.39	.28
IN.	.27	.29	1.50	.37	1.62	2.78	2.27	1.17	.54	.59	.45	.31

CAL YR 1983 TOTAL 11140.0 MEAN 30.5 MAX 1020 MIN 3.7 CFSM .91 IN 12.41
WTR YR 1984 TOTAL 10920.7 MEAN 29.8 MAX 423 MIN 4.5 CFSM .89 IN 12.16

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03339500 SUGAR CREEK AT CRAWFORDSVILLE, IN

LOCATION.--Lat 40°02'56", long 86°53'58", in SW¼NW¼ sec.32, T.19 N., R.4 W., Montgomery County, Hydrologic Unit 05120110, on left bank 327 ft upstream from Crawfordsville Electric Light and Power Co.'s dam at Crawfordsville, 0.5 mile upstream from bridge on U.S. Highway 231, 1.0 mile downstream from Walnut Fork Sugar Creek, and at mile 40.4.

DRAINAGE AREA.--509 mi².

PERIOD OF RECORD.--June 1938 to current year.

REVISED RECORDS.--WSP 973: 1939(M). WSP 1275: Drainage area. WSP 1335: 1949.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 657.77 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--46 years, 488 ft³/s, 13.02 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,300 ft³/s June 28, 1957, gage height, 14.48 ft; minimum daily, 2.4 ft³/s Sept. 24-27, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913, reached a stage of 17.3 ft from information by local resident, discharge, about 36,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 12	0900	4640	4.59	Mar. 16	2100	*6290	5.47
Feb. 11	——	ice jam	*5.96	Mar. 20	2200	5310	4.93
Feb. 13	1200	4640	4.59	Apr. 22	0800	4030	4.29

Minimum daily discharge, 15 ft³/s Oct. 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	35	252	190	92	263	617	484	321	121	41	30
2	16	36	199	190	100	297	539	422	298	109	39	27
3	15	36	179	190	770	255	532	406	270	107	38	36
4	15	36	347	190	1150	252	681	464	244	484	136	34
5	301	36	624	190	610	308	1890	442	227	706	109	36
6	74	35	1600	190	340	353	1530	403	210	366	61	32
7	39	36	1780	175	240	320	963	387	197	263	47	30
8	27	37	968	168	185	300	718	353	189	186	198	25
9	23	40	649	152	180	270	609	319	179	142	776	30
10	21	42	539	141	790	260	530	300	166	121	405	46
11	20	86	2010	112	2000	250	455	300	151	124	561	62
12	20	152	4250	130	3000	240	422	782	142	116	219	46
13	21	130	2580	149	4300	240	442	696	253	100	127	36
14	25	105	1860	141	3230	255	407	499	1250	87	83	44
15	25	95	1760	123	1930	287	422	390	648	80	70	62
16	23	102	1040	120	1440	4810	711	336	362	72	57	49
17	21	116	717	110	1300	5630	1020	306	269	63	51	36
18	25	116	649	100	1150	3450	1160	289	220	60	51	32
19	25	108	311	95	1090	2370	1000	276	188	55	54	30
20	51	105	374	85	933	4470	777	305	165	67	44	27
21	80	105	404	80	768	4510	848	413	149	70	39	25
22	229	99	410	80	637	3030	3340	381	142	62	41	23
23	243	95	350	86	558	2620	2810	463	263	52	39	27
24	149	112	300	88	493	2440	1800	482	368	48	36	34
25	99	141	260	86	419	3050	1250	418	323	46	32	54
26	74	126	250	95	351	2940	956	684	221	101	30	208
27	57	126	260	108	315	1950	771	578	220	119	30	130
28	49	513	260	112	242	1560	732	481	245	83	89	86
29	41	632	240	108	249	1200	587	454	175	61	51	62
30	39	363	210	100	——	893	585	396	136	51	46	49
31	37	——	200	95	——	724	——	359	——	44	36	——
TOTAL	1901	3796	25832	3979	28862	49777	29104	13268	8191	4166	3636	1448
MEAN	61.3	127	833	128	995	1606	970	428	273	134	117	48.3
MAX	301	632	4250	190	4300	5630	3340	782	1250	706	776	208
MIN	15	35	179	80	92	240	407	276	136	44	30	23
CFSM	.12	.25	1.64	.25	1.96	3.16	1.91	.84	.54	.26	.23	.10
IN.	.14	.28	1.89	.29	2.11	3.64	2.13	.97	.60	.30	.27	.11

CAL YR 1983 TOTAL 152452 MEAN 418 MAX 8140 MIN 15 CFSM .82 IN 11.14
WTR YR 1984 TOTAL 173960 MEAN 475 MAX 5630 MIN 15 CFSM .93 IN 12.71

03340500 WABASH RIVER AT MONTEZUMA, IN

LOCATION.--Lat 39°47'33", long 87°22'26", in SE¼NE¼ sec.35, T.16 N., R.9 W., Parke County, Hydrologic Unit 05120108, on downstream side of first pier from left bank of bridge on U.S. Highway 36 at Montezuma, 2.0 miles upstream from Raccoon Creek, 4.9 miles downstream from Sugar Creek, and at mile 240.0.

DRAINAGE AREA.--11,118 mi².

PERIOD OF RECORD.--October 1927 to current year. July 1924 to September 1927 (gage height only) in reports of State of Indiana Department of Natural Resources.

REVISED RECORDS.--WSP 1335: 1929, 1931(M). WSP 1505: 1954. WSP 1915: 1954(m). WSP 2109: Drainage area. WDR IN-74-1: 1973.

GAGE.--Water-stage recorder. Datum of gage is 457.75 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Oct. 1, 1927, to July 12, 1950, nonrecording gage at same site and datum.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--57 years, 9,817 ft³/s , 11.99 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 184,000 ft³/s May 20, 1943, gage height, 32.83 ft; minimum daily, 571 ft³/s Sept. 24, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 27, 1913, reached a stage of 34.0 ft, from floodmarks, discharge, 230,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 51,500 ft³/s Mar. 28, gage height, 22.75 ft; minimum daily, 1,650 ft³/s Oct. 2-4.

NOTE.--No gage-height record Dec. 19 to Jan. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1670	3350	12900	6600	3560	9430	34500	17100	28200	5330	3800	1840
2	1650	3150	12100	6800	3540	8910	30900	14500	23200	4870	3530	1760
3	1650	3170	11200	6800	4550	8430	28400	12000	18100	4640	3320	1780
4	1650	3220	11500	6400	7080	8490	27100	11500	14800	5080	3760	1960
5	1920	3230	11900	6000	9500	8330	28100	11500	12800	6970	4830	2220
6	2040	3010	13600	6000	9500	8220	27700	11300	11500	5730	3730	2110
7	1750	2880	17200	6000	9000	8100	26100	10700	10300	5120	3990	1900
8	1690	2850	21100	6000	7800	7820	24800	10000	9420	5360	3850	1800
9	1750	2840	22300	5900	7400	7610	24200	9300	8710	6310	4670	1870
10	1730	2710	20900	5600	8430	7560	23800	8710	8350	7610	4090	1880
11	1670	2630	22300	5400	12500	7580	23100	8300	7960	6780	3510	2030
12	1720	3380	29800	5200	21000	7100	21300	8170	7350	5790	3500	1980
13	1790	4110	32400	5000	31900	6700	19500	8450	6880	4690	3170	1960
14	1830	4230	35000	4700	40200	6860	18400	8110	6850	4220	3110	2010
15	1900	4580	38100	4500	45400	6910	16500	7770	7340	3930	3080	1990
16	1750	4880	37500	4300	49900	18400	15200	7610	7270	3760	2850	1820
17	2160	5010	33700	4200	46900	30000	15900	7420	6900	3420	2620	1690
18	2440	4510	27800	4000	43300	33700	18400	6930	6750	[illegible]	2350	1770
19	2400	4220	22000	3800	39500	36100	20200	6730	6690	[illegible]	2360	2720
20	2400	4390	18000	3500	36000	40400	19300	6670	6290	3040	2210	3040
21	2190	4080	16500	3500	32500	45400	18800	12800	5910	3200	2150	3000
22	3330	4010	16000	3400	29000	48400	26900	21900	5820	3180	2090	2930
23	7110	4190	14000	3400	25700	50400	32500	25500	6600	2910	2200	2250
24	8520	5100	10000	3500	22700	48800	32000	26800	7150	2910	2250	1740
25	6920	6920	6800	3600	20100	47900	30500	26500	7200	2690	2160	1680
26	5500	6810	6000	3560	16400	50500	27800	28300	7540	5000	2040	1960
27	4800	6710	6100	3720	13000	50900	25200	32500	7010	7500	1900	1950
28	4680	8580	6300	3730	11200	51100	23400	38000	6570	6110	1920	2150
29	4200	12100	6500	3810	10200	49700	21600	40500	6690	5300	2060	2040
30	4130	13700	6500	3770	---	44600	19400	37500	6130	4600	2250	1960
31	3710	---	6400	3580	---	38900	---	32700	---	4190	1930	---
TOTAL	92650	144550	552400	146170	617760	803250	721500	515770	282270	146610	91280	61790
MEAN	2989	4818	17820	4715	21300	25910	24050	16640	9409	4729	2945	2060
MAX	8520	13700	38100	6800	49900	51100	34500	40500	28200	7610	4830	3040
MIN	1650	2630	6000	3400	3540	6700	15200	6670	5820	2690	1900	1680
CFSM	.27	.43	1.60	.42	1.92	2.33	2.16	1.50	.85	.43	.27	.19
IN.	.31	.48	1.85	.49	2.07	2.69	2.41	1.73	.94	.49	.31	.21

CAL YR 1983 TOTAL 3625920 MEAN 9934 MAX 77300 MIN 1400 CFSM .89 IN 12.13
WTR YR 1984 TOTAL 4176000 MEAN 11410 MAX 51100 MIN 1650 CFSM 1.03 IN 13.97

03340800 BIG RACCOON CREEK NEAR FINCASTLE, IN

LOCATION.--Lat 39°48'45", long 86°57'14", in NW¼SW¼ sec.22, T.16 N., R.5 W., Putnam County, Hydrologic Unit 05120108, on left bank at downstream side of county road bridge, 1.6 miles upstream from Ramp Creek, 3.1 miles west of Fincastle, and at mile 48.8.

DRAINAGE AREA.--139 mi².

PERIOD OF RECORD.--August 1957 to current year. Prior to October 1963, published as Raccoon Creek near Fincastle.

REVISED RECORDS.--WSP 1909: 1958. WSP 2109: Drainage area. WDR IN-79-1: 1978.

GAGE.--Water-stage recorder. Datum of gage is 686.03 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--27 years, 141 ft³/s, 13.79 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,100 ft³/s Jan. 26, 1962; maximum gage height, 15.68 ft Jan. 26, 1962 (ice jam); minimum daily discharge, 1.8 ft³/s Sept. 16, 17, and Oct. 5, 6, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 19.10 ft, discharge, 39,900 ft³/s, from slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,900 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 12	0600	2220	8.71	Apr. 22	1800	*3120	*10.20
Mar. 16	1600	3100	10.17				

Minimum daily discharge, 3.7 ft³/s Oct. 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	18	105	60	35	90	143	138	71	26	17	7.8
2	3.7	18	84	60	38	82	125	123	65	25	16	7.3
3	3.7	18	76	60	350	79	129	119	59	24	15	14
4	4.1	16	242	60	260	78	180	126	54	154	14	14
5	11	14	367	59	190	99	411	124	51	455	14	11
6	12	13	672	58	120	120	323	136	48	138	13	13
7	12	13	528	57	90	105	211	143	45	70	12	10
8	8.5	12	305	56	80	97	164	124	43	44	12	8.0
9	7.2	12	225	54	73	90	145	109	42	36	16	35
10	6.1	13	208	52	415	85	126	98	38	32	154	61
11	5.9	39	919	50	815	83	109	91	36	28	232	44
12	6.9	86	1660	48	525	80	101	90	33	26	51	27
13	7.9	59	664	44	890	79	118	81	33	23	28	19
14	8.1	47	548	41	592	79	111	76	155	20	19	33
15	7.8	42	552	39	362	152	130	68	104	19	15	61
16	8.1	46	300	36	285	2440	253	64	63	18	13	37
17	8.3	57	150	34	286	1380	336	61	49	16	11	25
18	18	56	100	32	270	733	333	59	42	15	11	20
19	32	50	86	31	256	521	273	57	37	13	10	16
20	39	48	82	29	214	1230	208	65	33	16	9.1	14
21	120	60	90	28	185	824	279	84	31	17	8.3	12
22	168	51	100	28	158	625	2230	76	31	15	36	11
23	162	49	105	28	140	604	1060	99	30	13	49	21
24	89	128	100	29	125	510	615	87	43	11	19	23
25	60	98	85	33	110	760	406	79	39	11	12	188
26	47	71	80	36	96	601	300	238	31	214	9.7	523
27	39	67	80	45	89	403	234	151	35	160	8.6	168
28	32	398	82	50	71	332	197	121	44	50	42	85
29	26	255	75	52	85	253	165	104	33	45	17	59
30	22	154	70	42	---	196	168	88	27	24	13	46
31	19	---	64	37	---	164	---	79	---	19	9.5	---
TOTAL	998.0	2008	8804	1368	7205	12974	9583	3158	1445	1777	906.2	1613.1
MEAN	32.2	66.9	284	44.1	248	419	319	102	48.2	57.3	29.2	53.8
MAX	168	398	1660	60	890	2440	2230	238	155	455	232	523
MIN	3.7	12	64	28	35	78	101	57	27	11	8.3	7.3
CFSM	.23	.48	2.04	.32	1.78	3.01	2.30	.73	.35	.41	.21	.39
IN.	.27	.54	2.36	.37	1.93	3.47	2.56	.85	.39	.48	.24	.43

CAL YR 1983 TOTAL 41024.7 MEAN 112 MAX 2100 MIN 3.6 CFSM .81 IN 10.98
WTR YR 1984 TOTAL 51839.3 MEAN 142 MAX 2440 MIN 3.7 CFSM 1.02 IN 13.87

03340900 BIG RACCOON CREEK AT FERNDALE, IN

LOCATION.--Lat 39°41'44", long 87°05'01", in SE¼SW¼ sec.33, T.15 N., R.6 W., Parke County, Hydrologic Unit 05120108, on right bank 1.1 miles southwest of Ferndale, 1.8 miles northeast of Mansfield, 2.0 miles upstream from Rocky Fork Creek, 2.2 miles downstream from Cecil M. Harden Lake, and at mile 31.6.

DRAINAGE AREA.--222 mi².

PERIOD OF RECORD.--October 1956 to current year. Prior to October 1963, published as Raccoon Creek at Ferndale.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--None. Datum of gage was 582.36 ft National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to Oct. 1, 1974, water-stage recorder at site described in "LOCATION" paragraph.

REMARKS.--Flow regulated by Cecil M. Harden Lake. Daily discharge computed from relation between discharge, head, and gate openings for Cecil M. Harden Lake beginning Oct. 1, 1974.

COOPERATION.--Records of daily discharge furnished by Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--28 years, 229 ft³/s, 14.01 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,500 ft³/s June 28, 1957, gage height, 19.87 ft, from rating curve extended above 5,000 ft³/s on basis of records for station at Big Raccoon Creek at Mansfield; minimum daily, 2.7 ft³/s Oct. 11, 1956; no flow Aug. 23, 24, 1977, due to regulation.

EXTREMES FOR CURRENT YEAR:--Maximum daily discharge, 1,000 ft³/s May 1; minimum daily, 28 ft³/s, on many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	650	493	74	79	157	495	1000	317	48	129	28
2	28	588	336	86	53	54	751	573	316	36	81	28
3	28	584	244	86	99	54	882	624	257	28	46	28
4	28	580	245	110	375	54	811	991	149	28	28	55
5	28	576	247	123	604	55	81	626	110	28	28	81
6	28	572	400	100	694	55	313	315	62	64	28	81
7	28	568	628	86	465	55	490	315	48	82	28	65
8	28	563	755	86	184	56	489	242	48	82	28	38
9	28	410	775	87	123	56	489	120	48	161	28	28
10	28	347	401	87	124	56	759	81	48	240	28	79
11	28	345	170	87	127	56	978	81	48	240	54	110
12	28	343	130	110	387	57	812	81	48	134	81	132
13	28	342	134	123	522	57	964	120	48	65	187	157
14	28	340	135	79	700	57	956	158	48	41	180	94
15	40	338	302	53	669	57	949	158	61	28	81	48
16	47	390	410	53	526	62	563	158	81	28	81	69
17	34	419	544	53	526	68	205	107	81	28	46	81
18	28	416	542	53	525	71	205	81	81	28	28	81
19	28	414	724	53	524	72	206	81	81	28	28	80
20	28	412	890	53	522	74	206	81	81	28	28	80
21	131	409	919	39	520	76	208	81	81	28	28	80
22	311	406	904	31	517	77	213	81	81	28	28	80
23	361	403	887	31	514	78	218	135	58	28	28	80
24	479	401	867	31	511	79	220	319	48	28	28	80
25	477	473	441	31	507	80	220	297	48	28	28	80
26	475	508	142	32	503	81	293	153	48	28	28	153
27	473	504	123	44	499	82	354	199	48	28	28	330
28	572	502	123	54	494	82	354	243	48	28	28	394
29	722	501	123	98	367	83	354	214	48	28	28	393
30	837	498	212	124	---	83	740	111	48	[illegible]	28	392
31	713	---	54	124	---	287	---	214	---	[illegible]	28	---
TOTAL	6168	13802	13300	2281	12260	2371	14778	8040	2617	1960	1554	3505
MEAN	199	460	429	73.6	423	76.5	493	259	87.2	63.2	50.1	117
MAX	837	650	919	124	700	287	978	1000	317	240	187	394
MIN	28	338	54	31	53	54	81	81	48	28	28	28
CFSM	.90	2.07	1.93	.33	1.91	.35	2.22	1.17	.39	.29	.23	.53
IN.	1.03	2.31	2.23	.38	2.05	.40	2.48	1.35	.44	.33	.26	.59

CAL YR 1983 TOTAL 80910 MEAN 222 MAX 1150 MIN 22 CFSM 1.00 IN 13.56
WTR YR 1984 TOTAL 82636 MEAN 226 MAX 1000 MIN 28 CFSM 1.02 IN 13.85

03341300 BIG RACCOON CREEK AT COXVILLE, IN

LOCATION.--Lat 39°39'09", long 87°17'37", in SW¼SW¼ sec.15, T.14 N., R.8 W., Parke County, Hydrologic Unit 05120108, on right bank at downstream side of covered bridge on county road at Coxville, 0.8 mile upstream from Rock Run, 1.5 miles downstream from Little Raccoon Creek, 2.1 miles northwest of Rosedale, and at mile 13.1.

DRAINAGE AREA.--448 mi^2.

PERIOD OF RECORD.--October 1956 to current year. Prior to October 1963, published as Raccoon Creek at Coxville.

REVISED RECORDS.--WSP 2109: Drainage area. WDR IN-74-1: 1973.

GAGE.--Water-stage recorder. Datum of gage is 494.00 ft National Geodetic Vertical Datum of 1929 (Indiana Flood Control and Water Resources Commission bench mark).

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Cecil M. Harden Lake

AVERAGE DISCHARGE.--28 years, 486 ft^3/s, 14.74 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 108,000 ft^3/s June 28, 1957, gage height, 21.23 ft, from rating curve extended above 35,000 ft^3/s on basis of an estimate made by slope-area study; minimum daily, 6.5 ft^3/s Oct. 10, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,820 ft^3/s Apr. 22, gage height, 12.12 ft; minimum daily, 50 ft^3/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	629	652	200	150	418	729	1440	461	100	203	54
2	52	641	600	180	130	304	828	1260	458	98	161	52
3	50	645	385	165	350	274	1160	794	444	87	135	59
4	53	639	914	170	584	255	1500	1440	335	114	298	57
5	84	631	639	170	718	318	1550	1310	257	191	223	74
6	76	628	910	170	820	345	763	982	228	151	130	91
7	61	627	992	170	752	332	877	791	196	158	113	93
8	57	625	1070	165	396	319	818	669	177	151	126	73
9	56	578	1110	160	313	283	790	526	169	142	215	80
10	56	429	1070	150	458	276	827	413	158	228	132	73
11	55	430	1510	140	721	267	1240	372	152	272	111	151
12	57	413	1450	145	841	246	1130	358	145	266	123	148
13	59	403	813	145	1870	253	1350	361	142	154	134	171
14	59	397	880	140	1410	248	1300	399	160	114	228	190
15	58	401	843	130	1350	320	1270	367	142	101	157	139
16	70	423	906	120	963	2700	1200	346	151	90	128	107
17	78	478	853	110	907	1680	790	325	154	82	123	118
18	109	472	806	105	872	1080	667	260	151	81	87	125
19	89	468	812	100	859	840	610	245	147	76	74	124
20	160	469	1080	95	803	2370	573	253	144	78	68	123
21	212	468	1160	92	763	1410	910	320	144	79	65	121
22	404	475	1200	90	732	1120	3270	285	142	74	72	119
23	411	497	1180	90	710	948	2080	358	164	70	68	175
24	462	527	1140	94	691	758	1440	397	194	68	63	164
25	488	518	700	105	669	1520	1080	514	147	67	60	171
26	486	612	450	115	647	1100	901	970	124	101	58	447
27	490	677	300	125	634	836	912	624	124	328	57	394
28	608	999	230	130	603	725	916	539	116	207	63	461
29	626	751	200	150	609	595	837	548	109	155	67	455
30	628	686	250	160	---	505	968	388	104	126	61	445
31	629	---	220	160	---	461	---	355	---	194	56	---
TOTAL	6835	16636	25325	4241	21325	23116	33286	18209	5739	4203	3659	5054
MEAN	220	555	817	137	735	746	1110	587	191	136	118	168
MAX	629	999	1510	200	1870	2700	3270	1440	461	328	298	461
MIN	50	397	200	90	130	246	573	245	104	67	56	52
CFSM	.49	1.24	1.82	.31	1.64	1.67	2.48	1.31	.43	.30	.26	.38
IN.	.57	1.38	2.10	.35	1.77	1.92	2.76	1.51	.48	.35	.30	.42

CAL YR 1983 TOTAL 164960 MEAN 452 MAX 2980 MIN 50 CFSM 1.01 IN 13.70
WTR YR 1984 TOTAL 167628 MEAN 458 MAX 3270 MIN 50 CFSM 1.02 IN 13.92

03341500 WABASH RIVER AT TERRE HAUTE, IN

LOCATION.--Lat 39°28'00", long 87°25'08", in NE¼SW¼ sec.21, T.12 N., R.9 W., Vigo County, Hydrologic Unit 05120111, on left bank at upstream side of Wabash Avenue bridge at Terre Haute, 2.4 miles upstream from Sugar Creek, 4.2 miles downstream from Lost Creek, and at mile 214.4.

DRAINAGE AREA.--12,265 mi².

PERIOD OF RECORD.--August 1902 to December 1903 (gage height only), February 1905 to July 1906, October 1927 to current year. Gage-height records collected at site 3,300 ft upstream June 1891 to June 1897 and since December 1904 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 205: 1905. WSP 1335: 1944. WDR IN-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 442.90 ft National Geodetic Vertical Datum of 1929. See WSP 1725 for history of changes prior to Oct. 27, 1928.

REMARKS.--Records good. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--57 years, 10,840 ft³/s, 12.00 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 189,000 ft³/s May 20, 1943, gage height, 30.50 ft; minimum daily, 701 ft³/s Aug. 3, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 27, 1913, reached a stage of 31.1 ft, present site and datum, discharge, 245,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 49,600 ft³/s Mar. 27, gage height, 22.24 ft; minimum daily, 1,860 ft³/s Oct. 2-4.

REVISIONS.--Revised minimum daily discharge for 1983 water year and revised daily discharges, in cubic feet per second, for August and September 1983, are given below. These figures supersede those published in the 1983 report.

Minimum daily discharge, 1,810 ft³/s Sept. 18, 19, 27, 1983.

Aug. 1, 1983...	3290	Aug. 16, 1983...	2300	Sept. 1, 1983...	2090	Sept. 16, 1983...	2000
2	2840	17	2370	2	1960	17	1820
3	2660	18	2490	3	1930	18	1810
4	2640	19	2600	4	1890	19	1810
5	2640	20	2700	5	1850	20	1820
6	2510	21	2500	6	1820	21	1870
7	2440	22	2300	7	1820	22	1900
8	2480	23	2190	8	1830	23	1910
9	2340	24	2150	9	1840	24	1890
10	2260	25	2100	10	1820	25	1850
11	2200	26	2110	11	1850	26	1840
12	2310	27	2030	12	1880	27	1810
13	2430	28	2230	13	1930	28	1830
14	2430	29	2430	14	2100	29	1910
15	2320	30	2470	15	2170	30	1920
		31	2290				

Month	Ft³/s-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
August 1983	75050	3290	2030	2421	.20	.23
September 1983	56770	2170	1810	1892	.15	.17
Water year 1983	4455470	76600	1810	12210	1.00	13.51

03341500 WABASH RIVER AT TERRE HAUTE, IN

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1880	3950	13800	6980	3970	10900	39900	21200	35400	5830	3900	2120
2	1860	3700	12800	7190	3920	10100	36900	13400	31000	5120	3620	2080
3	1860	3640	12100	7550	5650	9540	34400	15400	23500	4800	3220	2040
4	1860	3640	13100	7290	7860	9250	32500	13900	18400	4860	3490	2090
5	2130	3680	13700	6760	9400	9440	33100	13500	15200	7250	4480	2210
6	2290	3620	14900	6570	9800	9440	34300	13800	13200	6780	3620	2370
7	2080	3450	17600	6540	8510	9260	31900	13300	11700	5590	3760	2210
8	1920	3400	20500	6600	8060	9020	29800	12100	10500	5550	3900	2090
9	1890	3380	22900	6430	8460	8530	28000	11100	9630	5900	4320	2140
10	1920	3360	22600	6280	9230	8230	26700	10300	9010	7330	4580	2180
11	1890	3240	23700	5980	12200	8380	25800	9650	8730	7370	3690	2180
12	1890	3450	30500	5770	19100	8090	24500	9330	8030	6490	3570	2310
13	1920	4180	33100	5510	27500	7600	23100	9490	7500	5310	3280	2110
14	2000	4520	35400	5320	35000	7480	21400	9490	7060	4450	3170	2240
15	2010	4710	37600	5050	39700	7610	19400	8970	7550	4060	3210	2260
16	2020	5050	38800	4810	44000	17900	17800	8610	7530	3780	3030	2140
17	2010	5300	38100	4720	47000	29300	17400	8410	7400	3560	2850	2020
18	2510	5150	35500	4650	45700	32800	19100	7990	7060	3250	2610	1970
19	2590	4680	29900	4350	43300	35600	21100	7570	6940	3170	2490	2310
20	2750	4680	22300	4090	40700	39200	21100	7290	6700	3100	2430	2080
21	3060	4650	18800	3910	38100	43500	21200	9590	6230	3160	2570	2940
22	3280	4430	17500	3770	35400	46100	30700	19000	6150	3200	2310	2910
23	5950	4590	15600	3800	31900	47500	35600	24700	6490	3050	2550	2910
24	8460	5120	12400	3690	27200	48100	36200	26800	7420	3090	2380	2310
25	8110	6730	7450	3750	23900	47700	35500	27700	7330	3090	2400	2110
26	6420	7320	6000	3870	20200	48300	34000	29200	7680	4940	2310	2490
27	5440	7440	6240	4040	16100	49100	31200	31900	7600	7530	2220	2460
28	5110	10100	6680	4080	13300	49300	29200	35100	6940	6570	2160	2440
29	4800	11800	6950	4150	11700	48900	26000	38100	6860	5950	2220	2520
30	4530	13900	7050	4190	—	47000	24000	39800	6560	5050	2340	2430
31	4300	—	7050	4010	—	43400	—	38500	—	4460	2310	—
TOTAL	100720	156860	600600	161700	646860	806570	843800	550190	321470	153450	94570	69470
MEAN	3249	5229	19370	5216	22310	26020	28130	17750	10720	4950	3051	2316
MAX	8460	13900	38800	7550	47000	49300	39900	39800	35400	7530	4580	2940
MIN	1860	3240	6000	3690	3920	7480	17400	7290	6150	3050	2160	1970
CFSM	.27	.43	1.58	.43	1.82	2.12	2.29	1.45	.87	.40	.25	.19
IN.	.31	.48	1.82	.49	1.96	2.45	2.56	1.67	.98	.47	.29	.21

CAL YR 1983 TOTAL 4168630 MEAN 11420 MAX 76600 MIN 1810 CFSM .93 IN 12.64
WTR YR 1984 TOTAL 4506260 MEAN 12310 MAX 49300 MIN 1860 CFSM 1.00 IN 13.67

03342000 WABASH RIVER AT RIVERTON, IN

LOCATION.--Lat 39°01'13", long 87°34'07", in NE¼SW¼ sec.30, T.7 N., R.10 W., Sullivan County, Hydrologic Unit 05120111, on left bank at downstream side of Illinois Central Railroad bridge at Riverton, 0.5 mile downstream from Turtle Creek, and at mile 162.0.

DRAINAGE AREA.--13,161 mi².

PERIOD OF RECORD.--October 1938 to current year. Prior to April 1939 monthly discharge only, published in WSP 1305. June 1911 to December 1914 (gage heights only) available in the Corps of Engineers office, Louisville, Ky.

REVISED RECORDS.--WSP 1335: 1939, 1950. WDR IN-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 414.65 ft National Geodetic Vertical Datum of 1929. Prior to July 17, 1951, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--46 years, 11,870 ft³/s, 12.25 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 201,000 ft³/s May 21, 1943, gage height, 29.36 ft; minimum daily, 858 ft³/s Sept. 27-30, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 28, 1913, reached a stage of 26.4 ft, from graph based on once-daily readings by Illinois Central Railroad Co., discharge, 250,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 59,700 ft³/s Mar. 28, gage height, 20.07 ft; minimum daily, 2,050 ft³/s Oct. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2280	4720	14300	7600	4400	13700	55100	30900	40000	7270	4850	2480
2	2240	4430	13900	7400	4300	12500	52100	26900	41000	6560	4470	2300
3	2200	4220	13200	7600	4200	11800	48800	22600	38900	5890	4190	2240
4	2210	4130	15100	8000	6000	11200	46900	19200	32800	6100	3880	2190
5	2120	4120	16000	7600	8200	11500	46600	16800	24800	6150	4150	2210
6	2320	4120	16500	7500	10000	12500	45100	16700	18800	8230	5320	2330
7	2470	4030	17800	7100	10500	11900	42900	17100	15400	7450	4690	2480
8	2280	3880	19100	7000	9180	11200	40300	15400	13300	6390	4270	2340
9	2100	3820	21400	7200	8790	10500	37500	14000	12100	6220	4420	2250
10	2050	3900	22900	7000	9470	9910	34900	12800	11200	6870	4840	2300
11	2070	3950	25500	6800	12300	9620	33000	11900	10600	8180	4890	2340
12	2080	3850	28900	6500	15200	9590	31400	11300	10100	8040	4250	2320
13	2070	4000	30300	6200	23400	9230	30200	11700	9350	7130	4020	2400
14	2080	4580	32200	5800	27600	8770	28500	12300	8760	5980	3750	2390
15	2140	4880	34400	5600	29900	8790	26100	11200	8390	5200	3620	2390
16	2170	5090	36500	5400	34000	14900	23300	10500	8760	4810	3620	2390
17	2170	5380	39100	5200	39100	23700	21400	10100	8710	4900	3440	2270
18	2180	5590	41100	5000	45100	26700	20700	9770	8450	4220	3270	2140
19	2730	5420	37000	4900	49500	29100	21700	9280	8120	3930	3040	2070
20	3170	5070	32000	4700	51000	35900	22700	8960	7970	3620	2880	2380
21	4190	5080	24000	4400	50300	41500	25400	9440	7680	3740	2790	2970
22	4110	5030	21000	4200	48600	45900	36100	13500	7240	3750	2740	3110
23	4380	5260	19000	4100	46000	49800	40900	21700	7120	3770	2660	3300
24	6750	6300	16000	4000	42800	52800	41200	24000	7510	3620	2640	3320
25	8530	6190	13000	3900	38300	55600	41300	26500	8240	3520	2660	2720
26	7930	7270	8000	4000	32800	57100	41400	27100	8310	3400	2660	2510
27	6610	8690	6600	4100	26700	57600	41200	27900	8490	3860	2570	2800
28	5780	15500	6800	4300	20300	58800	39400	29400	8310	7540	2460	2670
29	5490	13500	7200	4400	15700	59100	36700	31400	7700	7010	2380	2600
30	5170	13400	7400	4400	---	58000	33900	33900	7590	6240	2400	2660
31	4960	---	7600	4500	---	57000	---	37100	---	5370	2500	---
TOTAL	109030	175400	643800	176200	723640	886210	1086700	581350	415700	174760	110320	74870
MEAN	3517	5847	20770	5684	24950	28590	36220	18750	13860	5637	3559	2496
MAX	8530	15500	41100	8000	51000	59100	55100	37100	41000	8230	5320	3320
MIN	2050	3820	6600	3900	4200	8770	20700	8960	7120	3400	2380	2070
CFSM	.27	.44	1.58	.43	1.90	2.17	2.75	1.43	1.05	.43	.27	.19
IN.	.31	.50	1.82	.50	2.05	2.50	3.07	1.64	1.17	.49	.31	.21

CAL YR 1983 TOTAL 4637850 MEAN 12710 MAX 76500 MIN 1820 CFSM .97 IN 13.11
WTR YR 1984 TOTAL 5157980 MEAN 14090 MAX 59100 MIN 2050 CFSM 1.07 IN 14.58

BEST COPY AVAILABLE

03342100 BUSSERON CREEK NEAR HYMERA, IN

LOCATION.--Lat 39°12'54", long 87°18'41", in SW¼SW¼ sec.21, T.9 N., R.8 W., Sullivan County, Hydrologic Unit 05120111, on right bank at downstream side of bridge on County Road 900 North, 1.3 miles upstream from East Fork Busseron Creek, 1.9 miles northwest of Hymera, 4.1 miles upstream from West Fork Busseron Creek, and at mile 30.3.

DRAINAGE AREA.--16.7 mi².

PERIOD OF RECORD.--June 1966 to current year.

REVISED RECORDS.--WDR IN-72-1: 1971.

GAGE.--Water-stage recorder. Concrete control since Sept. 12, 1969. Datum of gage is 480.00 ft National Geodetic Vertical Datum of 1929 (U.S. Soil Conservation Service benchmark).

REMARKS.--Records fair. Flow affected by U.S. Soil Conservation Service floodwater-retarding structures.

AVERAGE DISCHARGE.--18 years, 19.2 ft³/s, 15.61 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,890 ft³/s Sept. 12, 1974, gage height, 18.58 ft; maximum gage height, 19.16 ft July 8, 1982; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,040 ft³/s Apr. 22, gage height, 17.96 ft. No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.15	24	1.3	1.2	11	16	12	2.4	.24	.06	.01
2	.00	.24	16	1.2	4.0	9.2	12	10	1.9	.19	.06	.00
3	.00	.53	12	1.1	22	13	16	9.8	1.7	.19	.06	.01
4	.05	.40	108	1.0	13	13	201	10	1.6	.76	.09	.01
5	.19	.24	38	1.0	7.0	79	203	7.9	1.4	.60	.15	.01
6	.06	.19	80	4.0	4.0	59	75	22	1.3	.53	.12	.00
7	.01	.19	36	15	2.7	40	54	16	1.9	.53	.12	.00
8	.00	.19	25	11	2.4	27	43	12	1.9	.34	5.1	.00
9	.00	.15	17	6.0	2.2	20	38	8.7	1.8	.24	15	.00
10	.00	.53	24	17	64	15	30	6.8	1.7	.15	11	.01
11	.00	.93	209	10	45	13	22	5.4	1.6	.09	5.6	.02
12	.00	.60	102	8.2	42	11	28	5.7	1.6	.09	3.3	.06
13	.04	.46	57	5.0	110	9.6	31	15	1.6	.06	1.4	.02
14	.01	.34	136	3.5	44	9.7	20	9.5	1.0	.06	1.1	.24
15	.00	.46	68	2.9	28	56	17	6.1	.91	.06	1.1	.15
16	.00	.84	48	2.3	20	180	20	4.6	.94	.06	.76	.09
17	.00	.84	32	1.8	16	64	26	3.6	.89	.06	.60	.04
18	.00	.76	20	1.4	15	50	20	3.0	.85	.04	.46	.01
19	.01	.68	14	1.2	16	41	15	2.5	.74	.04	.40	.01
20	8.1	1.1	10	.94	13	217	12	20	.70	.06	.29	.00
21	16	1.1	7.0	.88	9.8	82	404	20	.68	.06	.19	.00
22	6.4	.93	5.6	.84	8.4	90	486	55	.93	.06	1.7	.00
23	3.3	34	4.5	.80	7.8	58	124	102	1.1	.06	.84	1.4
24	2.1	15	3.8	1.5	12	45	74	26	.93	.06	.46	.46
25	1.4	5.9	3.2	2.5	15	115	53	14	.60	.06	.34	.53
26	1.1	3.8	2.7	4.0	11	116	40	16	.29	.09	.19	.76
27	.76	180	4.8	6.6	9.2	78	36	8.7	.40	.15	.09	.29
28	.46	99	2.0	10	28	74	27	6.8	.40	.19	.09	.19
29	.29	50	1.6	7.0	16	47	22	4.4	.40	.46	.09	.15
30	.19	35	1.5	4.0	—	31	20	3.5	.29	.19	.04	.09
31	.15	—	1.3	2.3	—	22	—	2.6	—	.09	.01	—
TOTAL	40.62	434.55	1114.0	136.26	588.7	1695.5	2185	449.6	34.45	5.86	50.81	4.56
MEAN	1.31	14.5	35.9	4.40	20.3	54.7	72.8	14.5	1.15	.19	1.64	.15
MAX	16	180	209	17	110	217	486	102	2.4	.76	15	1.4
MIN	.00	.15	1.3	.80	1.2	9.2	12	2.5	.29	.04	.01	.00
CFSM	.08	.87	2.15	.26	1.22	3.28	4.36	.87	.07	.01	.10	.009
IN.	.09	.97	2.48	.30	1.31	3.78	4.87	1.00	.08	.01	.11	.01

CAL YR 1983 TOTAL 7070.51 MEAN 19.4 MAX 445 MIN .00 CFSM 1.16 IN 15.75
WTR YR 1984 TOTAL 6739.91 MEAN 18.4 MAX 486 MIN .00 CFSM 1.10 IN 15.01

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03342150 WEST FORK BUSSERON CREEK NEAR HYMERA, IN

LOCATION.--Lat 39°11'10", long 87°19'44", in NW¼NW¼ sec.32, T.9 N., R.8 W., Sullivan County, Hydrologic Unit 05120111, on right bank at downstream side of bridge on State Highway 58, 1.4 miles upstream from mouth, 1.5 miles west of Hymera, and 3.7 miles east of U.S. Highway 41.

DRAINAGE AREA.--14.4 mi².

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 476.00 ft National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark).

REMARKS.--Records poor.

AVERAGE DISCHARGE.--18 years, 14.0 ft³/s, 13.24 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,930 ft³/s July 26, 1973, gage height, 13.23 ft; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 27	2000	619	11.12	Apr. 5	0100	652	11.22
Mar. 15	2400	590	11.05	Apr. 21	1800	*700	*11.36

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.30	3.6	2.0	3.6	6.2	11	8.9	2.9	.06	.00	.01
2	.00	.45	3.3	1.8	12	7.2	10	8.0	2.5	.05	.00	.05
3	.00	1.0	9.8	1.7	18	10	17	12	2.1	.29	.00	.05
4	.05	.80	39	1.6	23	12	200	16	1.6	1.1	.35	.09
5	.20	.43	32	1.6	17	98	185	9.5	1.3	.89	.14	.09
6	.06	.37	29	1.5	10	58	34	31	1.1	.56	.03	.09
7	.02	.37	29	3.6	8.0	32	21	17	.85	.35	.35	.05
8	.00	.34	21	7.6	6.6	19	18	12	.89	.18	.05	.06
9	.00	.30	18	15	5.8	13	21	8.7	.81	.14	.05	.09
10	.00	1.0	17	24	12	11	18	7.2	.64	.09	.06	.06
11	.00	1.8	129	15	23	10	15	6.4	.56	.06	.06	.09
12	.00	1.3	48	10	44	8.8	30	7.4	.49	.06	.06	.08
13	.10	.94	24	8.2	98	9.4	34	25	.35	.06	.06	.05
14	.02	.66	24	6.0	32	9.4	17	11	.25	.05	.06	.35
15	.01	.80	33	4.6	25	94	14	6.8	.18	.05	.06	.09
16	.00	1.6	23	3.2	20	121	18	5.3	.18	.05	.05	.05
17	.00	1.5	17	2.2	22	44	24	4.4	.18	.01	.09	.05
18	.00	1.4	14	1.6	20	37	16	3.9	.23	.01	.09	.09
19	.14	1.3	11	1.2	17	29	13	3.5	.23	.01	.09	.09
20	29	2.1	9.5	1.1	10	122	11	21	.14	.00	.14	.09
21	31	2.1	8.8	.96	7.8	37	240	25	.14	.14	.05	.29
22	15	1.8	14	1.0	6.5	37	220	12	.23	.14	.14	.49
23	7.4	64	9.8	1.7	5.6	26	35	106	.72	.14	.56	3.9
24	4.1	20	8.0	4.2	10	18	30	14	1.1	.09	.14	1.4
25	2.8	6.8	5.8	5.6	14	58	20	8.7	.49	.08	.06	.81
26	2.0	14	4.7	7.4	7.4	26	15	15	.29	.14	.09	3.0
27	1.5	75	4.0	10	5.7	61	21	7.0	.29	.09	.06	.64
28	.90	60	3.3	13	7.0	54	15	5.7	.42	.35	.06	.29
29	.58	12	2.8	12	6.4	30	12	4.9	.25	2.5	.06	.18
30	.35	5.8	2.4	7.5	—	16	13	4.1	.09	.14	.05	.06
31	.29	—	2.1	4.5	—	13	—	3.5	—	.00	.01	—
TOTAL	95.52	280.26	599.9	181.36	495.7	1107.0	1348	428.9	21.50	7.87	2.97	12.68
MEAN	3.08	9.34	19.4	5.85	17.1	35.7	44.9	13.8	.72	.25	.096	.42
MAX	31	75	129	24	98	122	240	106	2.9	2.5	.56	3.9
MIN	.00	.30	2.1	.96	3.6	6.2	10	3.5	.09	.00	.00	.01
CFSM	.21	.65	1.35	.41	1.19	2.48	3.12	.96	.05	.02	.007	.03
IN.	.25	.72	1.55	.47	1.28	2.86	3.48	1.11	.06	.02	.01	.03

CAL YR 1983 TOTAL 4835.01 MEAN 13.2 MAX 328 MIN .00 CFSM .92 IN 12.49
WTR YR 1984 TOTAL 4581.66 MEAN 12.5 MAX 240 MIN .00 CFSM .87 IN 11.84

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03342244 MUD CREEK NEAR CASS, IN

LOCATION.--Lat 39°05'55", long 87°13'46", in NE¼NE¼ sec.35, T.8 N., R.8 W., Sullivan County, Hydrologic Unit 05120111, on left upstream wingwall of bridge on County Road 100 North, 1.0 mile northeast of Cass, and 2.9 miles above mouth.

DRAINAGE AREA.--9.16 mi².

PERIOD OF RECORD.--October 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is 474.73 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Flow affected by surface-mined areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 441 ft³/s Dec. 25, 1982, gage height, 10.89 ft; minimum daily, 0.68 ft³/s Aug. 29, 30, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 342 ft³/s Apr. 22, gage height, 9.69 ft; minimum daily, 0.68 ft³/s Aug. 29, 30.

NOTE.--No gage-height record Jun. 15 to Jul. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	3.1	8.5	1.5	1.5	9.2	13	25	7.0	3.5	2.1	.75
2	1.1	4.8	8.6	1.4	13	14	12	20	5.6	3.0	2.0	.82
3	1.2	8.8	12	1.3	14	15	18	25	6.2	2.5	2.0	1.1
4	11	4.8	30	1.7	5.0	19	107	31	5.8	40	2.4	1.6
5	3.9	3.9	13	3.0	2.3	49	95	20	5.4	20	3.1	1.1
6	1.8	4.1	17	8.0	1.9	23	36	34	4.8	12	1.9	.96
7	1.6	4.2	8.5	6.0	1.8	15	24	22	4.5	9.0	1.3	.86
8	1.6	3.6	7.0	3.7	1.6	14	21	15	4.2	7.0	1.9	.78
9	1.7	5.2	6.3	5.0	6.7	10	20	12	4.0	5.0	2.1	.73
10	1.6	11	26	7.6	24	10	18	10	3.8	4.4	1.7	.80
11	1.6	12	88	6.0	15	9.6	16	11	3.7	3.8	1.7	1.2
12	1.7	7.8	29	5.0	20	7.7	19	26	3.6	3.4	1.4	.81
13	3.2	7.5	19	4.0	65	10	20	49	3.9	3.0	1.7	.74
14	2.2	7.8	46	3.2	21	12	17	33	3.5	2.7	1.4	3.5
15	2.0	12	15	2.6	15	25	16	19	3.2	2.4	1.1	1.2
16	1.9	18	11	2.1	15	47	19	11	3.1	2.2	1.0	.99
17	2.0	16	9.0	1.7	15	22	22	8.0	4.0	1.9	1.5	.98
18	2.5	17	7.6	1.5	15	20	19	6.2	3.0	1.8	1.2	1.2
19	2.8	20	6.2	1.4	18	21	16	5.0	2.7	2.3	1.1	1.0
20	68	28	5.4	1.3	13	77	16	12	2.6	2.1	.91	.98
21	75	32	4.8	1.2	11	30	168	15	2.5	2.0	.83	.92
22	22	33	4.2	1.2	11	31	173	6.6	6.0	1.9	1.3	.95
23	14	116	3.8	1.5	8.6	20	66	60	20	1.8	1.2	7.7
24	6.6	27	3.2	1.9	11	17	51	27	12	2.2	.92	10
25	5.0	11	2.9	2.6	14	46	40	15	9.6	1.8	.85	24
26	4.2	6.4	1.5	3.5	9.9	22	30	13	7.6	6.0	.78	18
27	4.4	110	2.2	6.2	9.3	39	42	11	8.8	4.1	.74	4.1
28	4.2	53	2.0	5.0	10	60	33	10	7.4	7.2	.71	2.4
29	3.4	18	1.8	3.5	9.2	29	25	9.0	6.0	13	.68	5.0
30	3.2	11	1.7	2.7	---	18	55	8.0	4.2	2.8	.68	5.3
31	3.4	---	1.5	2.0	---	15	---	7.6	---	2.3	.72	---
TOTAL	259.9	619.0	402.7	99.3	378.0	756.5	1227	576.4	169.7	177.1	42.92	100.49
MEAN	8.38	20.6	13.0	3.20	13.0	24.4	40.9	18.6	5.66	5.71	1.38	3.35
MAX	75	116	88	8.0	65	77	173	60	20	40	3.1	24
MIN	1.1	3.1	1.5	1.2	1.5	7.7	12	5.0	2.5	1.8	.68	.74
CFSM	.92	2.25	1.42	.35	1.42	2.66	4.47	2.03	.62	.62	.15	.37
IN.	1.06	2.51	1.64	.40	1.53	3.07	4.98	2.34	.69	.72	.17	.41

CAL YR 1983 TOTAL 4577.33 MEAN 12.5 MAX 180 MIN .86 CFSM 1.37 IN 18.59
WTR YR 1984 TOTAL 4809.01 MEAN 13.1 MAX 173 MIN .68 CFSM 1.43 IN 19.53

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03342300 BUSSERON CREEK NEAR SULLIVAN, IN

LOCATION.--Lat 39°04'33", long 87°23'11", in SE¼NW¼ sec.2, T.7 N., R.9 W., Sullivan County, Hydrologic Unit 05120111, on left bank at upstream side of bridge on State Highway 54, 1.5 miles southeast of Sullivan, 1.6 miles east of intersection of U.S. Highway 41 and State Highway 54, 1.7 miles upstream from Buttermilk Creek, and at mile 16.7.

DRAINAGE AREA.--138 mi².

PERIOD OF RECORD.--June 1966 to current year.

REVISED RECORDS.--WDR IN-72-1: 1971.

GAGE.--Water-stage recorder. Datum of gage is 440.00 ft National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark).

REMARKS.--Records good, except those for winter periods which are fair. Flow affected by surface-mined areas and U.S. Soil Conservation Service floodwater-retarding structures.

AVERAGE DISCHARGE.--18 years, 150 ft³/s, 14.76 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,050 ft³/s July 29, 1979, gage height, 16.28 ft; minimum daily, 0.9 ft³/s Sept. 8, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,890 ft³/s Apr. 23, gage height, 14.35 ft; minimum daily, 2.6 ft³/s Oct. 1, Aug. 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	12	188	28	28	86	180	247	56	9.1	7.1	3.0
2	2.8	14	140	27	40	92	155	190	51	8.2	6.6	3.5
3	2.7	21	123	26	200	113	152	169	46	7.6	6.6	3.6
4	12	18	392	25	170	137	629	256	39	94	8.8	4.1
5	18	13	304	26	130	409	1370	190	33	36	13	3.4
6	8.3	12	318	29	100	538	1390	221	29	24	9.1	3.3
7	5.2	12	240	32	70	408	652	234	27	16	7.4	3.2
8	4.4	12	176	35	60	214	370	176	25	12	6.8	2.9
9	3.7	13	168	37	50	149	307	138	22	10	8.7	2.9
10	3.4	20	144	37	188	124	264	116	20	9.7	22	4.8
11	3.8	28	615	36	482	107	213	101	19	8.8	21	5.4
12	4.4	21	1130	35	322	89	182	101	17	8.8	17	4.3
13	6.5	17	599	33	686	88	251	217	18	7.9	14	3.7
14	7.2	16	573	31	489	86	192	222	16	7.4	11	9.8
15	5.5	15	633	28	299	131	155	126	15	7.9	6.4	6.3
16	4.6	18	317	26	193	731	149	99	14	7.9	5.0	4.3
17	4.5	19	223	24	170	469	189	80	18	7.1	4.7	3.6
18	4.3	16	176	23	151	333	167	69	14	6.8	5.0	3.7
19	5.3	16	139	22	167	254	136	64	13	6.6	4.7	3.5
20	92	19	110	21	136	829	114	59	12	6.3	3.8	3.4
21	237	21	95	20	111	946	721	160	11	6.8	3.0	3.4
22	121	18	80	20	94	653	2040	106	14	6.0	2.9	3.2
23	67	182	65	22	82	443	2680	873	28	5.8	3.7	14
24	41	240	55	24	86	302	1660	363	20	5.8	3.5	18
25	26	99	48	26	163	492	936	180	15	5.5	3.2	29
26	19	68	42	29	116	462	585	155	12	8.2	3.0	65
27	17	322	38	32	97	406	473	117	14	12	2.7	18
28	17	1180	35	33	98	553	415	99	12	12	2.6	12
29	14	664	32	33	93	540	303	87	12	24	2.6	8.5
30	13	301	30	33	---	291	349	72	10	9.1	2.6	7.0
31	11	---	29	31	---	220	---	62	---	7.9	2.8	---
TOTAL	784.2	3435	7257	884	5071	10595	17379	5349	652	405.2	221.3	258.8
MEAN	25.3	115	234	28.5	175	342	579	173	21.7	13.1	7.14	8.63
MAX	237	1180	1130	37	686	946	2680	873	56	94	22	65
MIN	2.6	12	29	20	28	86	114	59	10	5.5	2.6	2.9
CFSM	.18	.83	1.70	.21	1.25	2.48	4.20	1.25	.16	.10	.05	.06
IN.	.21	.93	1.96	.24	1.36	2.06	4.68	1.44	.18	.11	.06	.07

CAL YR 1983 TOTAL 54108.6 MEAN 148 MAX 2040 MIN 2.6 CFSM 1.07 IN 14.59
WTR YR 1984 TOTAL 52251.5 MEAN 143 MAX 2680 MIN 2.6 CFSM 1.04 IN 14.09

03342500 BUSSERON CREEK NEAR CARLISLE, IN

LOCATION.--Lat 38°58'26", long 87°25'33", in NW¼ survey 17, Vincennes Tract, Sullivan County, Hydrologic Unit 05120111, on left bank 10 ft downstream from bridge on State Highway 58, 1.5 miles northwest of Carlisle, and 7.2 miles upstream from mouth.

DRAINAGE AREA.--228 mi².

PERIOD OF RECORD.--October 1943 to current year.

REVISED RECORDS.--WSP 1335: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 425.36 ft National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark). Prior to Nov. 8, 1950, nonrecording gage at same site and datum. Nov. 8, 1950, to Oct. 31, 1969, at site 200 ft upstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow affected by U.S. Soil Conservation Service floodwater-retarding structures and surface-mined areas.

AVERAGE DISCHARGE.--41 years, 228 ft³/s, 13.58 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,800 ft³/s Jan. 5, 1950, gage height, 20.05 ft; maximum gage height, 20.30 ft May 9, 1961; no flow many days in 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,200 ft³/s and maximum(*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 22	1500	*3340	*15.80

Minimum daily discharge, 4.5 ft³/s Aug. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	15	405	46	46	157	342	451	68	16	12	5.8
2	10	17	284	44	65	171	273	315	60	16	11	5.5
3	13	20	245	43	340	230	264	275	53	15	9.8	5.6
4	15	26	738	43	270	297	1030	468	47	839	12	5.8
5	40	19	678	45	200	827	1850	338	43	204	18	6.0
6	24	16	578	50	150	931	1710	408	38	135	14	5.1
7	14	15	520	55	100	603	1560	415	35	61	13	4.8
8	12	16	335	58	90	393	976	310	34	44	12	4.6
9	10	18	305	60	80	270	560	232	32	27	12	4.9
10	11	25	259	60	531	224	468	189	30	23	15	6.4
11	12	40	1000	58	752	192	366	159	29	20	21	8.6
12	13	31	1510	56	565	159	313	152	25	19	20	8.4
13	18	24	1350	54	1140	155	417	657	25	17	17	7.7
14	18	21	1220	50	972	157	325	641	24	15	15	11
15	16	21	1150	47	514	235	252	275	23	14	12	13
16	14	21	718	44	361	990	239	194	24	14	7.7	9.1
17	13	24	411	40	319	940	291	148	27	14	6.2	7.5
18	14	22	308	38	282	620	268	123	28	13	5.8	7.3
19	15	21	269	36	316	460	218	106	39	12	6.0	7.0
20	184	22	200	34	261	1350	180	95	24	11	5.8	6.2
21	621	27	160	32	212	1410	1080	177	21	11	5.1	6.0
22	335	25	140	33	180	445	3040	161	21	11	5.1	6.2
23	155	453	110	35	155	1030	2940	459	33	10	6.4	15
24	81	621	95	40	163	614	2970	595	29	9.3	6.0	44
25	46	225	80	45	309	905	2480	256	26	8.6	5.5	48
26	32	126	70	50	225	925	1620	207	21	86	4.9	174
27	25	655	65	53	176	863	1060	163	21	44	4.6	34
28	22	1720	60	54	173	1120	707	128	20	14	4.6	23
29	19	1410	55	54	166	1170	538	109	19	42	4.5	18
30	16	876	50	53	---	707	625	90	17	18	4.5	15
31	15	---	48	51	---	447	---	79	---	13	5.5	---
TOTAL	1843	6572	13416	1459	9113	18997	28940	8375	936	1795.9	302.0	523.5
MEAN	59.5	219	433	47.1	314	613	965	270	31.2	57.9	9.74	17.5
MAX	621	1720	1510	60	1140	1410	3040	657	68	839	21	174
MIN	10	15	48	32	46	155	180	79	17	8.6	4.5	4.6
CFSM	.26	.96	1.90	.21	1.38	2.69	4.23	1.18	.14	.25	.04	.08
IN.	.30	1.07	2.19	.24	1.49	3.10	4.72	1.37	.15	.29	.05	.09

CAL YR 1983 TOTAL 97323.4 MEAN 267 MAX 3030 MIN 6.3 CFSM 1.17 IN 15.88
WTR YR 1984 TOTAL 92272.4 MEAN 252 MAX 3040 MIN 4.5 CFSM 1.11 IN 15.05

03343000 WABASH RIVER AT VINCENNES, IN

LOCATION.--Lat 38°42'19", long 87°31'14", T.3 N., R.10 W., Lawrence County, IL, Hydrologic Unit 05120111, on right bank 30 ft east of Illinois State Highway 33, 300 ft upstream from Kelso Creek, 570 ft downstream from U.S. Highway 50 bridge, 5.1 miles downstream from Maria Creek, 7.5 miles upstream from Embarras River and at mile 129.6 .

DRAINAGE AREA.--13,706 mi² .

PERIOD OF RECORD.--October 1929 to current year. Prior to December 1929 monthly discharge only, published in WSP 1305. Gage-height records for flood peaks in 1867 and 1883, intermittent records 1887-1904, and continuous since November 1904, collected at site 1.8 miles downstream, are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1173: 1943 (maximum gage height only). WSP 1335: 1930-31, 1933, 1936. WSP 1909: 1955. WDR IN-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 394.43 ft National Geodetic Vertical Datum of 1929. Oct. 1, 1968, to June 19, 1979, recording gage at site 570 ft upstream at same datum. Oct. 1, 1960, to September 30, 1968, nonrecording gage at site 1.8 miles downstream at same datum. Oct. 1, 1960, to Sept. 30, 1968, auxiliary water-stage recorder at site 2.8 miles upstream from base gage at datum 0.80 ft lower. See WSP 1725 for history of changes prior to Oct. 1, 1960.

REMARKS.--Records good. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--55 years, 12,020 ft³/s, 11.91 in/yr .

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 189,000 ft³/s May 22, 23, 1943, gage height, 29.33 ft, at former site 1.8 miles downstream and at present datum; minimum daily, 770 ft³/s Aug. 4, 5, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 29, 1913, reached a stage of 26.3 ft, at former site 1.8 miles downstream and at present datum, from floodmarks, determined by Corps of Engineers, discharge, 255,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 54,500 ft³/s Mar. 28, gage height 22.29 ft; minimum daily, 2,170 ft³/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2200	4950	17200	8800	4840	16400	47400	34100	31500	7890	5510	2730
2	2230	4680	17100	8690	5210	14500	44600	30800	32900	7300	5060	2640
3	2170	4430	15400	8840	7640	13500	43400	28000	33400	6600	4720	2530
4	2340	4290	16100	9000	10200	12900	43600	25300	29300	7960	4470	2460
5	2980	4190	18400	8710	10900	14100	42400	21700	25000	7940	4310	2380
6	2420	4180	18700	8350	11400	15500	41000	19600	19500	8240	5080	2420
7	2540	4170	19500	8350	11100	15000	39600	20100	18200	8980	5580	2550
8	2570	4080	20100	8170	10100	13500	37800	19200	15700	6940	4820	2590
9	2350	3950	21200	8120	9300	12300	36300	17200	13900	6220	4780	2490
10	2210	3960	22000	8120	10300	11400	34100	15300	12800	6150	4950	2460
11	2180	4050	25600	7910	13000	10800	31900	13900	12200	7640	5420	2540
12	2220	4020	26700	7400	16000	10600	30300	12800	11300	8580	4970	2550
13	2240	3950	27800	7040	21500	10400	29000	13400	10700	7960	4390	2540
14	2220	4280	29000	6640	25600	9910	28200	16100	10000	6920	4140	2610
15	2250	4760	30300	6350	27500	9720	27000	14700	9300	5930	3790	2560
16	2280	4970	31700	6090	28600	14300	25500	13100	9330	5370	3850	2560
17	2340	5240	33000	5790	30500	21600	23600	11600	9550	4990	3820	2550
18	2280	5530	34300	5550	33900	25300	22100	10900	9380	4740	3600	2460
19	2430	5600	34600	5300	37800	27200	21700	10400	9030	4450	3390	2390
20	4910	5390	34900	5000	40900	30800	22100	9830	8710	4240	3160	2390
21	6260	5100	33400	4700	42200	35400	25200	9850	8450	4160	3050	2880
22	5640	5170	28900	4500	41700	39600	34200	11700	7960	4080	2990	3360
23	4800	5690	24400	4300	40300	42300	40000	18900	7590	4100	2960	3620
24	5440	7470	20900	4200	38400	44800	43300	23200	7710	4060	2860	3850
25	7910	7040	17000	4200	36000	47900	46600	24500	8420	3880	2850	3600
26	8630	7060	11700	4300	32500	50200	47400	25400	8760	3810	2670	3140
27	7440	9970	8000	4500	28600	51600	46200	25900	8870	3900	2890	2990
28	6330	18500	8400	4600	24200	54300	43300	26700	8980	5900	2740	3060
29	5670	19000	8800	4700	19300	53300	40000	27400	8400	7690	2640	2870
30	5420	17200	8900	4800	---	51600	37400	28600	8010	6990	2610	2890
31	5120	---	8900	4800	---	49800	---	29900	---	6200	2640	---
TOTAL	118020	192870	670900	197820	669290	830530	1075200	610060	412650	189810	120810	82660
MEAN	3807	6429	21640	6381	23080	26790	35840	19680	13760	6123	3897	2755
MAX	8630	19000	34900	9000	42200	54300	47400	34100	33400	8980	5580	3850
MIN	2170	3950	8000	4200	4840	9720	21700	9830	7590	3810	2610	2380
CFSM	.28	.47	1.58	.47	1.68	1.96	2.62	1.44	1.00	.45	.28	.20
IN.	.32	.52	1.82	.54	1.82	2.25	2.92	1.66	1.12	.52	.33	.22

CAL YR 1983 TOTAL 4817400 MEAN 13200 MAX 63600 MIN 2020 CFSM .96 IN 13.08
WTR YR 1984 TOTAL 5170620 MEAN 14130 MAX 54300 MIN 2170 CFSM 1.03 IN 14.05

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03345500 EMBARRAS RIVER AT STE. MARIE, IL

LOCATION.--Lat 38°56'10", long 88°01'10", in NW¼NW¼ sec.30, T.6 N., R.14 W., Jasper County, Hydrologic Unit 05120112, on right bank at upstream side of highway bridge at Ste. Marie and at mile 48.2.

DRAINAGE AREA.--1,516 mi².

PERIOD OF RECORD.--October 1909 to December 1912, August 1914 to current year.

REVISED RECORDS.--WSP 1083: 1943. WSP 1113: 1910-31, 1933, 1939-40, 1945(M). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 445.75 ft National Geodetic Vertical Datum of 1929. (levels by Corps of Engineers). Prior to June 29, 1940, nonrecording gage and June 29, 1940, to Jan. 24, 1967, water-stage recorder at same site at datum 1.00 ft higher.

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--73 years, 1,231 ft³/s, 11.03 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 44,800 ft³/s Jan. 4, 1950, gage height, 25.95 ft, present datum, from rating curve extended above 29,000 ft³/s; maximum gage height, 26.54 ft, present datum, June 30, 1957; minimum discharge, 1 ft³/s Oct. 5-9, 1914.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 6,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 28	2030	7190	17.65	Mar. 22	1115	8470	18.78
Dec. 13	2030	7380	17.86	Mar. 26	0130	7040	17.47
Feb. 14	0500	8030	18.47	Apr. 6	2000	6610	16.85
Mar. 18	1130	7380	17.86	Apr. 23	0830	*27500	*23.78

Minimum daily discharge, 32 ft³/s Oct. 19, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	267	2240	880	450	938	2490	4300	2180	[illegible]	88	58
2	34	241	1970	890	710	847	2090	2880	1950	191	88	58
3	33	225	1760	820	2840	925	1800	2580	1200	196	87	58
4	33	202	3960	800	4680	1090	3110	2730	992	178	87	57
5	43	200	5520	800	3250	1740	5490	2400	890	166	87	57
6	40	200	4960	850	2270	2580	6370	2480	757	187	89	57
7	34	203	4730	900	1780	2050	5420	4240	695	275	90	56
8	33	214	3590	1000	1540	1560	3810	2550	627	395	91	56
9	35	210	3140	1100	1450	1230	3430	1900	577	311	233	56
10	33	233	2970	1150	1590	1090	3040	1550	535	251	481	54
11	33	321	4990	1230	3280	1020	2740	1370	497	211	175	61
12	33	290	6880	980	3880	961	2370	1270	455	189	113	67
13	35	299	7280	772	6530	896	3450	2270	420	177	98	69
14	34	364	7170	659	7510	866	3560	5040	392	168	86	162
15	33	390	7020	612	7820	1050	2120	2400	367	158	79	247
16	36	361	6900	572	6710	4320	1920	1160	357	150	76	121
17	37	322	6370	524	5980	6300	2380	928	331	145	74	85
18	35	293	5570	499	5890	7190	2270	805	309	140	72	74
19	33	269	4010	490	4900	6380	1950	724	294	133	70	66
20	136	259	2620	450	3840	6940	1730	685	282	128	68	61
21	392	315	2000	420	3100	7750	4410	862	274	125	66	57
22	800	361	1690	400	2740	8210	16400	940	261	119	65	56
23	1200	880	1380	380	2390	7050	25900	2090	251	112	64	246
24	802	2340	1300	360	2060	6170	17200	1890	245	105	63	922
25	822	1260	1200	350	1780	6650	10200	1650	239	100	62	414
26	785	1090	1150	370	1540	6840	7500	2080	236	100	61	484
27	727	2630	1100	550	1360	5400	6450	2500	237	97	60	330
28	599	6760	1050	700	1220	4880	5540	2380	220	95	60	170
29	452	6540	1000	600	1080	4510	6010	3170	200	95	60	115
30	360	3350	950	500	—	3520	5170	3620	232	94	58	95
31	307	—	910	480	—	2990	—	3260	—	90	58	—
TOTAL	8042	30897	107180	21048	94170	113905	166240	68422	16052	5059	3009	4489
MEAN	259	1030	3457	679	3247	3674	5541	2207	535	163	97.1	149
MAX	1200	6760	7280	1230	7820	8210	25900	5040	2180	395	481	922
MIN	33	200	910	350	450	847	1730	685	200	90	58	54
CFSM	.17	.68	2.28	.45	2.14	2.42	3.66	1.46	.35	.11	.06	.10
IN.	.20	.76	2.63	.52	2.31	2.79	4.08	1.68	.39	.12	.07	.11

CAL YR 1983 TOTAL 530255 MEAN 1455 MAX 7590 MIN 32 CFSM .96 IN 13.03
WTR YR 1984 TOTAL 638491 MEAN 1745 MAX 25900 MIN 33 CFSM 1.15 IN 15.67

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03346000 NORTH FORK EMBARRAS RIVER NEAR OBLONG, IL

LOCATION.--Lat 39°00'37", long 87°56'47", in NW¼NW¼ sec.35, T.7 N., R.14 W., Crawford County, Hydrologic Unit 05120112, on left bank at downstream side of bridge on State Highway 33, 0.8 mi upstream from Illinois Central Gulf Railroad bridge, 2 mi west of Oblong, and at mile 10.5.

DRAINAGE AREA.--318 mi^2.

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 456.19 ft National Geodetic Vertical Datum of 1929. Prior to Dec. 11, 1940, nonrecording gage and Dec. 11, 1940, to Sept. 30, 1964, water-stage recorder at same site at datum 2.00 ft higher. Oct. 8, 1971, to May 15, 1979, water-stage recorder at site 0.8 mi downstream at present datum.

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--44 years, 258 ft^3/s, 11.02 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,100 ft^3/s Jan. 4, 1950, gage height, 24.38 ft, present datum, from rating curve extended above 16,000 ft^3/s; no flow for many days in 1953-54, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 21	0015	4540	17.80	Apr. 22	1700	*14300	*21.17
Apr. 5	1930	4610	17.85				

Minimum daily discharge, 0.15 ft^3/s Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.15	9.4	234	30	75	96	183	765	69	9.2	3.5	3.4
2	.19	9.0	163	28	222	125	158	908	59	8.8	3.6	3.1
3	.19	8.2	175	26	1370	158	198	277	52	8.6	4.1	3.1
4	.19	8.7	1640	25	1960	200	1020	375	45	16	39	3.3
5	1.6	8.9	2260	25	1060	605	3520	908	40	101	19	3.2
6	2.3	9.8	1610	40	373	1060	3420	551	38	50	6.2	2.9
7	2.0	7.6	1470	150	263	749	1190	1160	33	17	13	2.8
8	1.6	7.0	445	250	199	407	348	451	29	11	60	2.8
9	2.7	6.8	275	300	148	223	307	284	27	9.2	434	3.6
10	2.7	15	272	350	359	187	587	209	25	8.1	254	8.0
11	1.7	36	1520	368	1370	163	414	168	23	7.3	66	9.0
12	2.0	59	2770	218	1410	142	331	151	20	6.7	34	18
13	1.9	60	2270	124	2010	121	1270	755	19	6.3	18	12
14	2.2	36	1320	70	2440	124	1190	2010	18	6.0	13	44
15	1.9	23	2050	50	1060	241	433	583	17	5.7	11	69
16	1.3	17	1040	40	473	1790	438	215	16	5.5	10	19
17	1.1	15	294	30	644	2890	1090	155	15	5.2	8.8	9.1
18	1.2	14	194	25	638	2240	682	123	15	4.9	8.5	6.8
19	1.5	13	140	20	653	823	361	105	14	4.8	7.9	5.6
20	36	13	115	17	486	2940	259	108	14	4.5	7.2	5.3
21	199	12	100	15	282	3670	2010	230	13	4.6	6.9	4.2
22	356	18	90	15	219	2140	12100	290	13	4.5	6.9	3.8
23	326	139	80	15	185	876	7460	798	13	4.2	6.9	78
24	156	647	70	20	159	457	2810	433	14	4.1	6.7	287
25	64	356	60	30	142	1090	743	168	14	3.9	5.9	115
26	32	136	50	40	124	1170	406	339	12	3.9	4.6	93
27	21	809	45	80	109	705	317	433	11	3.9	4.3	127
28	17	3110	40	100	100	1080	536	181	11	4.2	4.2	39
29	13	2900	37	100	82	698	1080	130	10	4.1	3.9	16
30	11	705	34	75	—	313	827	100	9.7	3.6	3.8	10
31	10	—	32	60	—	272	—	80	—	3.6	3.7	—
TOTAL	1269.42	9606.4	20895	2736	18605	27645	45644	12219	708.7	340.4	1078.6	1007.0
MEAN	40.9	307	674	88.3	642	892	1521	394	23.6	11.0	34.8	33.6
MAX	356	3110	2770	368	2440	3670	12100	2010	69	101	434	287
MIN	.15	6.8	32	15	65	96	158	80	9.7	3.6	3.5	2.8
CFSM	.13	.97	2.12	.28	2.02	2.81	4.78	1.24	.07	.04	.11	.11
IN.	.15	1.08	2.44	.32	2.18	3.25	5.34	1.43	.08	.04	.13	.12

CAL YR 1983 TOTAL 117099.24 MEAN 321 MAX 4230 MIN .11 CFSM 1.01 IN 13.70
WTR YR 1984 TOTAL 141354.52 MEAN 386 MAX 12100 MIN .15 CFSM 1.21 IN 16.54

03347000 WHITE RIVER AT MUNCIE, IN

LOCATION.--Lat 40°12'15", long 85°23'14", in SE¼NW¼ Buckley Reserve, Delaware County, Hydrologic Unit 05120201, on right bank 200 ft downstream from Walnut Street bridge in Muncie, 6 miles upstream from Bell Creek, and at mile 315.8.

DRAINAGE AREA.--241 mi².

PERIOD OF RECORD.--November 1930 to current year. Prior to October 1948, published as West Fork White River at Muncie. Daily gage heights from July 1923 to December 1929 are available in the district office.

REVISED RECORDS.--WSP 1335: 1931-32(M), 1936(M), 1938, 1948. WSP 1435: 1955. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 917.10 ft National Geodetic Vertical Datum of 1929 (city of Muncie bench mark). See WSP 1705 for history of changes prior to Jan. 28, 1942. Jan. 28, 1942, to Apr. 27, 1964, water-stage recorder at present site at datum 3.00 ft higher.

REMARKS.--Records good. Natural flow affected by regulation of Prairie Creek Reservoir and by diversion of municipal water supply by Muncie Water Works Co. above gage. Records of diversion available since October 1937.

AVERAGE DISCHARGE.--53 years (1931 to current year), 208 ft³/s, 11.71 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,300 ft³/s Apr. 21, 1964, gage height, 14.98 ft present datum; maximum gage height, 21.07 ft Jan. 15, 1937, present datum; minimum daily discharge, 1.1 ft³/s Sept. 16, 17, 23-25, 1954, and Oct. 10, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 22.6 ft in March 1913, present datum, discharge, 20,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,500 ft³/s and maximum(*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 13	1700	2510	7.62	Feb. 11	0800	2740	8.9[illegible]
Feb. 3	0100	ice jam	*10.45	Mar. 17	0200	*3710	8.60
				Apr. 23	0100	3620	8.53

Minimum daily discharge, 9.5 ft³/s Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.8	26	275	120	97	257	311	244	128	45	32	14
2	12	30	192	115	148	207	280	223	118	47	32	21
3	11	32	158	110	600	180	285	207	109	51	36	19
4	9.5	37	158	105	1000	171	395	211	100	75	41	26
5	28	40	495	98	600	203	1040	199	92	139	69	28
6	35	39	640	95	290	328	1300	180	89	454	38	21
7	28	36	833	90	190	307	798	171	85	235	40	21
8	18	32	677	85	150	266	521	163	78	128	40	18
9	16	28	395	80	160	230	405	154	69	78	36	18
10	13	67	285	76	350	210	333	146	64	58	34	21
11	13	290	252	73	1500	195	290	146	56	49	45	21
12	17	294	806	68	1030	189	261	171	51	45	51	23
13	35	156	2260	64	872	203	266	154	51	36	47	21
14	48	102	1460	61	677	163	252	135	51	36	32	23
15	31	106	826	58	495	257	290	121	51	38	26	18
16	18	528	665	56	400	2720	628	115	49	38	18	21
17	11	366	465	53	365	2720	1180	109	49	32	16	19
18	22	227	333	51	333	1190	886	103	47	30	22	16
19	23	165	266	49	328	743	703	100	43	28	26	15
20	47	136	230	48	298	1220	604	118	41	28	18	14
21	60	145	210	47	252	1500	470	311	41	30	21	13
22	117	153	200	45	219	1010	2370	324	41	30	18	12
23	214	161	190	45	199	798	2590	500	43	28	19	16
24	153	646	180	45	192	826	1360	443	41	33	[illegible]	16
25	89	516	170	70	244	1070	846	298	38	34	16	45
26	60	298	160	90	324	1280	598	252	56	40	19	78
27	47	203	150	140	319	791	470	199	56	43	18	69
28	37	432	145	170	280	622	375	196	51	40	14	39
29	34	833	140	130	298	510	324	215	49	38	14	34
30	32	470	130	105	—	421	302	176	47	34	14	32
31	29	—	125	103	—	356	—	143	—	32	14	—
TOTAL	1317.3	6594	13471	2545	12210	21143	20733	6227	1884	2052	894	783
MEAN	42.5	220	435	82.1	421	682	691	201	62.8	66.2	28.8	26.1
MAX	214	833	2260	170	1500	2720	2590	500	128	454	69	78
MIN	9.5	26	125	45	97	163	252	100	38	28	14	12
CFSM	.18	.91	1.81	.34	1.75	2.83	2.87	.83	.26	.28	.12	.11
IN.	.20	1.02	2.08	.39	1.88	3.26	3.20	.96	.29	.32	.14	.12

CAL YR 1983 TOTAL 54553.1 MEAN 149 MAX 2260 MIN 5.5 CFSM .62 IN 8.42
WTR YR 1984 TOTAL 89853.3 MEAN 246 MAX 2720 MIN 9.5 CFSM 1.02 IN 13.87

03347500 BUCK CREEK NEAR MUNCIE, IN

LOCATION.--Lat 40°08'05", long 85°22'25", in SW¼SE¼ sec.34, T.20 N., R.10 E., Delaware County, Hydrologic Unit 05120201, on left bank at downstream side of bridge on County Road 400 South, 1.0 mile upstream from Muncie Water Works Co. pumping station, 4.2 miles southeast of court house in Muncie, and at mile 10.6.

DRAINAGE AREA.--35.5 mi².

PERIOD OF RECORD.--October 1954 to current year.

REVISED RECORDS.--WSP 1909: 1955, 1957. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 944.67 ft National Geodetic Vertical Datum of 1929. Prior to May 5, 1955, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--30 years, 36.0 ft³/s, 13.77 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,780 ft³/s Apr. 21, 1964, gage height, 13.96 ft; minimum daily, 4.7 ft³/s Jan. 17, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 15 ft, from information by local residents. Date unknown.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 16	0700	530	8.63	Apr. 22	2000	*653	*9.47

Minimum daily discharge, 11 ft³/s Oct. 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	18	40	25	21	33	49	56	35	21	17	13
2	11	19	36	25	30	32	46	52	34	21	18	14
3	11	21	34	25	228	31	50	49	33	22	17	21
4	14	21	87	26	82	31	64	47	31	26	68	16
5	23	20	89	26	53	44	118	46	31	69	38	16
6	15	18	93	27	37	56	98	45	30	51	26	15
7	14	18	71	26	33	46	69	43	30	34	21	15
8	14	17	51	25	28	41	57	43	29	29	20	14
9	14	17	45	24	35	37	52	42	28	26	18	15
10	14	44	43	24	119	34	48	40	28	24	17	16
11	14	170	144	24	192	33	45	40	27	24	18	15
12	16	71	303	24	115	31	44	41	27	23	16	15
13	25	47	128	23	109	30	46	39	26	21	16	15
14	20	38	99	23	82	28	42	37	27	21	15	16
15	17	49	85	23	62	73	44	36	26	20	15	16
16	15	76	63	22	54	379	73	35	26	20	14	15
17	15	50	53	22	51	146	111	34	25	20	14	15
18	25	40	46	21	47	99	100	34	24	20	18	14
19	22	35	41	20	46	80	81	33	24	19	15	14
20	28	35	38	19	41	162	69	46	25	19	14	14
21	32	35	37	19	38	143	58	70	25	20	14	14
22	46	31	44	21	35	106	357	52	25	19	15	13
23	51	84	40	21	33	97	239	89	32	18	15	16
24	34	109	37	22	33	101	139	57	26	18	14	20
25	28	59	33	26	43	154	101	47	24	19	14	30
26	25	44	30	33	47	132	84	45	23	19	14	50
27	23	44	28	44	44	93	73	40	24	20	14	24
28	21	133	27	26	40	81	68	45	23	18	14	20
29	20	69	26	23	35	68	64	44	22	18	14	18
30	19	48	25	23	---	58	60	40	22	18	13	16
31	18	---	25	21	---	53	---	37	---	17	13	---
TOTAL	655	1480	1941	753	1813	2532	2549	1404	812	734	569	525
MEAN	21.1	49.3	62.6	24.3	62.5	81.7	85.0	45.3	27.1	23.7	18.4	17.5
MAX	51	170	303	44	228	379	357	89	35	69	68	50
MIN	11	17	25	19	21	28	42	33	22	17	13	13
CFSM	.59	1.39	1.76	.69	1.76	2.30	2.39	1.28	.76	.67	.52	.49
IN.	.69	1.55	2.03	.79	1.90	2.65	2.67	1.47	.85	.77	.60	.55

CAL YR 1983 TOTAL 12124.4 MEAN 33.2 MAX 329 MIN 9.7 CFSM .94 IN 12.70
WTR YR 1984 TOTAL 15767.0 MEAN 43.1 MAX 379 MIN 11 CFSM 1.21 IN 16.52

03348000 WHITE RIVER AT ANDERSON, IN

LOCATION.--Lat 40°06'20", long 85°40'16", in NW¼NW¼ sec.18, T.19 N., R.8 E., Madison County, Hydrologic Unit 05120201, on downstream side of abandoned Twelfth Street bridge abutment, 250 ft upstream from municipal water-supply plant in Anderson, 1 mile upstream from Killbuck Creek, and at mile 293.3.

DRAINAGE AREA.--406 mi^2.

PERIOD OF RECORD.--July 1925 to September 1926, October 1931 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at site 950 ft downstream December 1910 to February 1918, 250 ft downstream from February 1918 to Sept. 14, 1973, and at present site since Sept. 15, 1973, are contained in reports of National Weather Service. Prior to October 1948, published as West Fork White River at Anderson.

REVISED RECORDS.--WSP 1335: 1932, 1934-35, 1936(M), 1938-40. WSP 1385: 1950(P). WSP 1725: 1956 (P). WSP 1909: 1956. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 825.02 ft National Geodetic Vertical Datum of 1929. Prior to May 12, 1934, nonrecording gage at present site and datum. May 12, 1934, to Sept. 14, 1973, nonrecording gage at site 250 ft downstream at same datum. Sept. 15, 1973, to Sept. 23, 1976, nonrecording gage at present site and datum.

REMARKS.--Records fair. Prior to Sept. 15, 1973, the City of Anderson diverted water for its municipal supply above the gage then in use.

AVERAGE DISCHARGE.--54 years, 380 ft^3/s, 12.71 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,700 ft^3/s Apr. 21, 1964, gage height, 19.41 ft; maximum gage height, 19.96 ft June 14, 1958; minimum daily discharge, 9.1 ft^3/s Sept. 24, 1940.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 23.6 ft Mar. 25, 1913, at site 250 ft downstream and at present datum, based on determination of National Weather Service at site then in use, discharge, 28,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 12	2300	3770	10.03	Mar. 21	0600	3000	9.26
Feb. 11	1800	2930	9.23	Apr. 23	1000	*5020	a*11.10
Mar. 17	1300	4760	10.89				

Minimum daily discharge, 39 ft^3/s Oct. 2.

a from high-water mark

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	81	432	225	176	350	662	585	275	121	95	75
2	39	81	326	230	182	356	587	530	255	112	89	86
3	41	118	279	225	1010	325	572	502	238	151	131	185
4	49	103	515	225	1710	303	760	502	212	219	391	148
5	132	95	1070	225	888	343	1290	478	200	295	438	112
6	104	95	1150	210	485	536	2260	442	195	624	209	109
7	87	92	1300	210	282	547	1790	410	187	447	177	89
8	70	83	800	205	240	472	1210	380	177	276	174	86
9	57	78	526	185	267	375	882	355	167	209	144	86
10	50	138	438	190	574	344	710	330	155	176	134	112
11	49	859	834	170	2470	344	594	310	141	163	120	100
12	52	809	3230	145	1850	299	529	534	134	154	120	92
13	161	458	3010	150	1600	291	551	462	131	135	115	89
14	144	310	1700	155	1330	293	524	414	134	118	115	106
15	121	279	1350	145	953	316	594	346	131	112	110	106
16	86	671	1100	140	731	2990	1010	269	128	115	98	83
17	60	722	900	135	650	4590	1940	258	131	107	89	86
18	81	454	700	130	592	2510	1910	255	124	101	109	85
19	100	321	560	120	558	1740	1580	245	115	95	100	78
20	134	262	450	105	521	1940	1100	272	109	93	95	73
21	212	252	350	105	447	2790	864	526	106	104	89	70
22	325	262	385	105	391	2160	1680	610	115	94	98	70
23	391	332	355	120	351	1790	4740	800	121	86	115	95
24	354	1070	325	135	331	1790	2830	869	148	81	106	144
25	228	859	305	150	393	1880	1720	585	112	106	98	158
26	170	510	280	185	496	2560	1270	518	115	128	92	325
27	138	384	270	312	526	1910	989	376	148	141	89	174
28	115	966	260	361	478	1560	844	357	134	121	100	115
29	103	1230	250	253	402	1210	718	418	124	109	89	83
30	89	699	245	216	---	950	694	346	124	98	86	70
31	83	---	240	174	---	773	---	300	---	98	81	---
TOTAL	3868	12673	23935	5641	20884	38637	37404	13584	4594	4987	4096	3286
MEAN	125	422	772	182	720	1246	1247	438	153	161	132	110
MAX	391	1230	3230	361	2470	4590	4740	869	275	624	438	325
MIN	39	78	240	105	176	291	524	245	106	81	81	70
CFSM	.31	1.04	1.90	.45	1.77	3.07	3.07	1.08	.38	.40	.33	.27
IN.	.35	1.16	2.19	.52	1.91	3.54	3.43	1.24	.42	.46	.38	.30

CAL YR 1983 TOTAL 113929 MEAN 312 MAX 3230 MIN 34 CFSM .77 IN 10.44
WTR YR 1984 TOTAL 173579 MEAN 474 MAX 4740 MIN 39 CFSM 1.17 IN 15.90

BEST COPY AVAILABLE

03348020 KILLBUCK CREEK NEAR GASTON, IN

LOCATION.--Lat 40°15'45", long 85°30'53", in SE¼SW¼ sec.16, T.21 N., R.9 E., Delaware County, Hydrologic Unit 05120201, on right bank 30 ft upstream from bridge on County Road 500 North, 3.6 miles southwest of Gaston, and at mile 15.6.

DRAINAGE AREA.--25.5 mi².

PERIOD OF RECORD.--June 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 873.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for periods of ice effect, which are fair.

AVERAGE DISCHARGE.--16 years, 25.0 ft^3/s, 13.31 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1200 ft^3/s June 2, 1980, gage height, 12.70 ft; minimum daily, 0.76 ft^3/s Jan. 19, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 250 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 12	1500	296	9.78	Mar. 21	0500	271	9.55
Mar. 17	0100	*381	*10.29	Apr. 23	1200	282	9.68

Minimum daily discharge, 1.0 ft^3/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	3.3	19	8.5	7.8	14	34	22	18	3.5	2.2	1.7
2	1.1	3.6	15	8.2	9.8	13	30	20	16	3.4	2.1	1.6
3	1.0	4.1	13	7.8	106	13	28	18	14	3.4	2.5	2.4
4	1.1	5.4	34	7.6	77	12	43	18	13	11	2.8	3.8
5	2.3	5.8	94	7.4	42	18	88	16	12	35	3.0	3.1
6	1.7	5.3	117	7.2	24	25	99	15	11	15	2.6	2.5
7	1.3	4.9	97	7.0	16	23	57	15	11	11	2.4	2.4
8	1.2	4.6	54	6.8	13	21	41	14	10	7.6	2.6	2.3
9	1.2	4.3	42	6.7	9.0	19	34	13	9.5	6.2	2.7	2.2
10	1.2	5.8	37	6.6	68	17	28	12	8.8	5.5	2.4	2.3
11	1.2	78	91	6.5	175	15	24	12	8.4	5.0	2.1	2.3
12	1.4	54	276	6.4	121	14	22	22	7.8	4.7	2.0	2.2
13	2.0	21	188	6.2	121	13	23	22	7.5	4.1	2.0	1.8
14	3.5	13	109	6.0	91	13	22	17	7.9	3.7	2.0	1.7
15	3.3	11	88	5.8	64	22	33	14	7.3	3.6	1.9	1.8
16	2.6	29	58	5.6	52	326	73	13	6.7	3.5	1.9	1.8
17	2.3	24	43	5.4	49	320	104	12	6.6	3.3	1.8	1.9
18	2.3	15	35	5.2	44	145	87	11	6.2	3.4	2.1	1.7
19	2.5	11	29	5.0	41	94	63	11	5.7	3.2	2.0	1.7
20	3.5	9.6	25	4.9	34	178	47	11	5.2	3.0	2.0	1.5
21	4.7	9.8	23	4.6	30	230	37	14	4.9	3.2	2.0	1.4
22	7.0	8.2	27	4.4	26	132	117	13	4.8	3.1	2.0	1.4
23	13	14	18	4.7	23	107	256	20	4.8	2.7	2.1	1.4
24	7.0	60	16	4.9	22	102	140	23	4.7	2.5	2.2	1.7
25	4.3	31	13	6.0	26	155	80	18	4.4	2.6	2.0	1.9
26	3.7	18	12	8.5	26	198	57	17	4.1	3.1	1.9	2.0
27	3.6	14	12	18	22	109	44	16	4.4	3.3	1.8	2.4
28	3.4	87	13	14	15	82	35	18	4.3	3.0	1.6	2.0
29	3.2	70	11	11	14	61	29	39	3.9	2.5	1.7	1.4
30	3.3	31	9.8	9.5	---	47	27	29	3.6	2.4	1.7	1.1
31	3.3	---	9.1	8.8	---	39	---	22	---	2.4	1.6	---
TOTAL	94.3	655.7	1627.9	225.2	1368.6	2577	1802	537	236.5	169.9	65.7	59.4
MEAN	3.04	21.9	52.5	7.26	47.2	83.1	60.1	17.3	7.88	5.48	2.12	1.98
MAX	13	87	276	18	175	326	256	39	18	35	3.0	3.8
MIN	1.0	3.3	9.1	4.4	7.8	12	22	11	3.6	2.4	1.6	1.1
CFSM	.12	.86	2.06	.29	1.85	3.26	2.36	.68	.31	.22	.08	.08
IN.	.14	.96	2.37	.33	2.00	3.76	2.63	.78	.34	.25	.10	.09

CAL YR 1983 TOTAL 6656.9 MEAN 18.2 MAX 276 MIN 1.0 CFSM .71 IN 9.71
WTR YR 1984 TOTAL 9419.2 MEAN 25.7 MAX 326 MIN 1.0 CFSM 1.01 IN 13.74

03348350 PIPE CREEK AT FRANKTON, IN

LOCATION.--Lat 40°13'38", long 85°45'58", in SE¼NE¼ sec.31, T.21 N., R.7 E., Madison County, Hydrologic Unit 05120201, on right bank 20 ft downstream from bridge on County Road 500 West, at northeast edge of Frankton.

DRAINAGE AREA.--113 mi².

PERIOD OF RECORD.--May 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 810.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--16 years, 104 ft³/s, 12.50 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,340 ft³/s June 3, 1980, gage height, 14.78 ft; minimum daily, 3.6 ft³/s Oct. 3, 1983.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 10, 1958, reached a stage of 15.5 ft, from floodmark determined by State of Indiana, Department of Natural Resources, discharge, 4,900 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 12	1600	1390	9.71	Mar. 21	0100	1260	9.40
Feb. 11	1100	791	8.08	Mar. 26	0500	999	8.74
Mar. 16	2300	*1610	*10.20				

Minimum daily discharge, 3.6 ft³/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	12	98	36	32	80	141	85	91	16	11	7.4
2	3.8	13	76	35	33	76	121	75	77	16	11	7.4
3	3.6	16	64	34	495	70	117	74	65	16	12	16
4	4.1	16	139	33	340	66	164	73	55	96	14	9.1
5	6.0	20	289	33	193	81	306	66	50	256	14	8.4
6	5.1	19	441	31	113	110	302	63	44	138	12	7.7
7	4.6	14	455	30	84	109	201	60	39	103	11	7.1
8	4.6	13	247	30	60	95	153	58	36	61	13	6.8
9	4.4	12	163	30	40	83	129	54	33	41	14	7.1
10	4.4	28	135	29	288	73	111	52	30	32	13	11
11	4.8	194	312	28	707	68	96	51	28	27	12	9.5
12	5.3	154	1160	27	577	59	88	108	26	24	11	8.8
13	16	82	913	27	594	58	95	107	26	21	11	7.4
14	13	52	574	26	498	55	91	86	38	19	11	8.1
15	11	43	471	25	336	68	196	68	32	17	10	8.4
16	9.3	63	312	24	266	1060	395	60	28	16	10	7.1
17	9.0	71	210	24	237	1250	397	55	26	15	11	6.8
18	13	55	156	23	226	693	346	53	24	16	11	6.2
19	13	41	135	22	219	471	270	51	22	15	12	6.2
20	18	36	100	21	184	803	207	56	20	14	9.5	5.9
21	21	32	80	20	151	1030	166	75	19	15	9.1	5.9
22	28	28	100	19	126	625	281	76	19	14	9.9	5.6
23	25	43	80	20	110	482	468	113	20	13	10	7.4
24	19	133	65	21	103	469	352	115	21	12	8.4	8.4
25	15	105	54	23	193	552	247	90	19	15	8.4	8.4
26	14	70	52	38	170	841	187	109	17	15	7.7	17
27	12	61	52	72	132	493	150	96	22	16	7.7	8.8
28	12	311	54	53	104	353	123	109	20	14	8.8	8.4
29	14	288	48	42	86	274	104	234	18	12	8.0	8.1
30	14	151	41	39	---	207	102	163	15	11	8.0	7.4
31	12	---	38	34	---	169	---	115	---	11	7.4	---
TOTAL	342.8	2174	7114	949	6697	10925	6106	2650	980	1107	326.9	247.8
MEAN	11.1	72.5	229	30.6	231	352	204	85.5	32.7	35.7	10.5	8.26
MAX	28	311	1160	72	707	1250	468	234	91	256	14	17
MIN	3.6	12	38	19	32	55	88	51	15	11	7.4	5.6
CFSM	.10	.64	2.03	.27	2.04	3.12	1.81	.76	.29	.32	.09	.07
IN.	.11	.72	2.34	.31	2.20	3.60	2.01	.87	.32	.36	.11	.08

CAL YR 1983 TOTAL 25588.5 MEAN 70.1 MAX 1160 MIN 3.6 CFSM .62 IN 8.42
WTR YR 1984 TOTAL 39619.5 MEAN 108 MAX 1250 MIN 3.6 CFSM .96 IN 13.04

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03349000 WHITE RIVER AT NOBLESVILLE, IN

LOCATION.--Lat 40°02'50", long 86°01'00", in SE¼SE¼ sec.36, T.19 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, on right bank at downstream side of Logan Street bridge in Noblesville, 1.5 miles upstream from Cicero Creek, 5.1 miles downstream from dam at Clare, and at mile 263.5.

DRAINAGE AREA.--858 mi².

PERIOD OF RECORD.--October 1946 to current year. Gage-height records collected at present site from December 1913 to December 1935, and after June 1951, and at site 400 ft downstream January 1936 to May 1951, are contained in reports of National Weather Service. Prior to October 1948, published as West Fork White River at Noblesville.

REVISED RECORDS.--WSP 1335: 1949. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 738.16 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow slightly regulated by powerplant above station.

AVERAGE DISCHARGE.--38 years, 835 ft³/s, 13.22 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,800 ft³/s Apr. 22, 1964, gage height, 21.31 ft; minimum daily, 44 ft³/s Sept. 28, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 6,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 13	1200	6530	12.57	Mar. 21	1800	6630	12.67
Mar. 17	2200	*8040	*14.03				

Minimum daily discharge, 88 ft³/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	164	1060	433	294	656	1370	1040	655	232	186	185
2	92	168	774	448	307	617	1190	901	583	224	187	185
3	88	183	653	437	1350	603	1100	850	525	231	199	221
4	92	203	910	440	2980	555	1340	858	474	388	328	289
5	144	188	1940	440	1900	590	1870	796	442	1250	950	236
6	181	173	2720	429	1130	794	2900	742	421	1050	461	209
7	157	176	3200	433	572	973	2700	697	400	1010	331	195
8	140	171	2370	380	451	887	1880	672	382	635	326	178
9	121	166	1520	355	567	746	1480	640	369	439	304	175
10	107	195	1180	362	981	653	1230	605	342	361	260	206
11	105	1210	1790	339	3720	619	1050	574	323	332	240	206
12	107	1610	5180	263	4460	566	952	765	311	318	242	185
13	163	1020	6350	285	4010	522	959	865	303	276	234	178
14	257	641	4490	299	3650	512	926	730	305	252	236	183
15	202	487	3290	275	2570	505	1610	630	307	233	220	201
16	172	568	2460	271	1910	3830	2480	562	298	225	199	183
17	141	1120	1720	265	1610	7470	3050	521	285	223	192	168
18	141	847	1320	250	1480	6990	3280	494	277	216	365	166
19	163	620	949	230	1400	4110	2680	476	270	209	254	164
20	183	500	772	200	1280	4800	2170	480	259	207	214	159
21	263	450	660	200	1090	6390	1820	665	251	213	196	156
22	340	428	780	200	914	5510	2180	903	268	211	189	154
23	489	506	680	230	794	4090	4950	997	323	199	194	161
24	509	1130	610	264	729	3590	5340	1370	297	192	194	214
25	416	1620	560	299	877	3630	3380	1090	278	192	188	255
26	306	1040	530	328	999	4890	2400	958	243	224	188	391
27	252	746	510	386	978	4300	1870	821	265	236	187	351
28	222	1470	490	464	860	3140	1530	726	294	226	225	266
29	198	2540	480	431	739	2490	1280	977	260	205	190	211
30	176	1720	470	363	---	1950	1180	974	241	193	186	183
31	164	---	475	322	---	1610	---	773	---	188	185	---
TOTAL	6186	22060	50895	10323	44602	78588	62127	24152	10251	10588	8050	6215
MEAN	200	735	1642	333	1538	2535	2071	779	342	342	260	207
MAX	509	2540	6350	464	4460	7470	5340	1370	655	1250	950	391
MIN	88	164	470	200	294	505	926	476	241	188	185	154
CFSM	.23	.86	1.91	.39	1.79	2.96	2.41	.91	.40	.40	.30	.24
IN.	.27	.96	2.21	.45	1.93	3.41	2.69	1.05	.44	.46	.35	.27

CAL YR 1983 TOTAL 230754 MEAN 632 MAX 6350 MIN 88 CFSM .74 IN 10.00
WTR YR 1984 TOTAL 334035 MEAN 913 MAX 7470 MIN 88 CFSM 1.06 IN 14.48

03350700 STONY CREEK NEAR NOBLESVILLE, IN

LOCATION.--Lat 40°01'44", long 85°59'42", in NE¼NE¼ sec.7, T.18 N., R.5 E., Hamilton County, Hydrologic Unit 05120201, on left bank at downstream side of county road bridge, 1.4 miles upstream from mouth, and 1.4 miles southeast of Noblesville.

DRAINAGE AREA.--50.8 mi².

PERIOD OF RECORD.--July 1967 to current year.

REVISED RECORDS.--WDR IN-82-1: 1981.

GAGE.--Water-stage recorder. Datum of gage is 749.00 ft National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark).

REMARKS.--Records fair.

AVERAGE DISCHARGE.--17 years, 47.5 ft³/s, 12.70 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,640 ft³/s Feb. 23, 1979; maximum gage height, 7.60 ft Jan. 30, 1982; minimum daily discharge, 2.3 ft³/s Aug. 4, 5, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 300 ft³/s and maximum (*).

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 12	0700	424	4.61	Mar. 16	1245	*755	*6.09
Feb. 3	0715	324	4.09	Mar. 20	1630	545	5.18

Minimum daily discharge, 3.1 ft³/s Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	3.8	46	17	10	33	91	50	29	11	8.4	5.9
2	3.5	3.6	36	16	37	31	83	40	26	11	8.4	5.9
3	3.2	3.7	31	15	262	30	86	41	23	12	8.8	6.5
4	3.1	3.9	100	15	105	30	125	45	21	61	8.8	7.6
5	4.9	4.1	143	15	64	44	158	34	20	140	63	6.5
6	8.2	4.1	175	14	35	88	130	33	19	57	20	6.2
7	9.6	3.9	140	14	29	76	104	32	18	38	17	6.2
8	9.0	3.9	95	13	23	66	90	29	17	24	16	5.9
9	4.5	3.9	73	13	19	44	85	27	16	20	12	6.2
10	4.0	7.3	66	12	117	39	70	24	15	17	9.6	10
11	5.8	98	216	12	215	35	60	24	14	16	8.8	8.0
12	8.2	63	398	11	157	30	51	27	14	16	8.8	6.9
13	10	33	249	11	185	31	62	23	14	14	8.0	6.5
14	11	19	188	11	150	27	55	21	15	13	7.6	6.9
15	8.1	13	159	10	110	39	100	19	13	12	6.9	6.5
16	5.8	14	121	9.8	96	632	169	18	13	12	6.9	6.2
17	5.0	17	99	9.5	88	430	175	17	13	12	7.2	5.9
18	7.8	13	79	9.3	79	262	152	17	13	11	9.2	5.6
19	9.1	11	63	9.0	79	213	125	17	12	11	7.6	5.6
20	9.0	9.7	50	8.6	67	432	107	21	11	11	7.2	5.6
21	13	9.4	40	8.2	57	361	96	27	11	12	6.9	5.9
22	15	8.0	48	7.8	46	268	198	23	12	11	6.9	5.9
23	16	30	37	8.5	40	237	200	36	45	11	7.2	6.9
24	9.9	86	31	9.1	38	201	152	29	24	10	6.9	10
25	5.1	54	27	11	77	214	121	27	17	11	6.5	21
26	4.4	33	23	19	68	225	104	31	14	12	6.2	115
27	4.0	35	23	31	50	185	89	24	14	12	6.2	39
28	3.9	151	24	19	71	165	73	29	14	11	18	20
29	3.7	105	22	14	43	142	64	53	12	9.2	11	15
30	3.6	69	20	12	---	119	70	40	12	8.8	7.2	12
31	3.7	---	18	11	---	102	---	33	---	8.8	6.2	---
TOTAL	215.7	913.3	2840	395.8	2417	4831	3241	911	511	635.8	339.4	381.3
MEAN	6.96	30.4	91.6	12.8	83.3	156	108	29.4	17.0	20.5	10.9	12.7
MAX	16	151	398	31	262	632	200	53	45	140	63	115
MIN	3.1	3.6	18	7.8	10	27	51	17	11	8.8	6.2	5.6
CFSM	.14	.60	1.80	.25	1.64	3.07	2.13	.58	.34	.40	.22	.25
IN.	.16	.67	2.08	.29	1.77	3.54	2.37	.67	.37	.47	.25	.28

CAL YR 1983 TOTAL 12285.1 MEAN 33.7 MAX 398 MIN 3.1 CFSM .66 IN 9.00
WTR YR 1984 TOTAL 17632.3 MEAN 48.2 MAX 632 MIN 3.1 CFSM .95 IN 12.91

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03351000 WHITE RIVER NEAR NORA, IN

LOCATION.--Lat 39°54'35", long 86°06'20", in NW¼NW¼ sec.20, T.17 N., R.4 E., Marion County, Hydrologic Unit 05120201, on downstream side of center pier of bridge on 82nd Street, 2 miles east of Nora, 14 miles upstream from Fall Creek, and at mile 247.9.

DRAINAGE AREA.--1,219 mi².

PERIOD OF RECORD.--October 1929 to current year. Prior to April 1930, monthly discharge only, published in WSP 1305. Prior to October 1948, published as West Fork White River near Nora.

REVISED RECORDS.--WSP 1335: 1930-31, 1934(M), 1936, 1941, 1943, 1945, 1947-48. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 710.94 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Oct. 26, 1929 to July 29, 1942, at site 200 ft downstream at same datum. Supplemental water-stage recorder 4.5 miles downstream.

REMARKS.--Records good. Flow slightly regulated by Morse Reservoir.

AVERAGE DISCHARGE.--55 years, 1,097 ft³/s, 12.22 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,400 ft³/s May 19, 1933; maximum gage height, 18.65 ft Apr. 23, 1964; minimum daily discharge, 49 ft³/s Sept. 17, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 22.4 ft, from floodmark, determined by Indiana Department of Highways, discharge, 58,500 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 7,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 13	1700	7900	10.09	Mar. 22	0100	9140	10.95
Mar. 18	0700	*10,600	*11.80	Apr. 24	1200	7190	9.59

Minimum daily discharge, 137 ft³/s Oct. 2-4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	139	192	1440	620	403	881	2000	1510	917	287	242	208
2	137	196	976	600	424	850	1800	1230	821	271	243	199
3	137	196	814	584	1680	839	1690	1120	751	258	239	226
4	137	212	1140	580	3290	788	1890	1120	676	386	286	302
5	166	215	2140	580	2650	850	2500	1030	616	1410	963	296
6	202	205	3100	580	1700	1060	3240	981	571	1540	844	239
7	209	199	3810	591	1000	1330	3380	909	536	1390	502	221
8	177	196	3180	548	650	1290	2530	881	496	949	441	203
9	160	196	2110	496	700	1060	2050	815	477	676	431	206
10	149	250	1650	479	1090	925	1790	766	447	524	454	231
11	143	906	2240	436	3860	881	1560	724	417	459	376	242
12	143	1740	5720	423	5530	811	1360	875	386	462	383	232
13	179	1290	7690	401	5160	771	1400	1370	384	403	352	209
14	290	789	6360	421	4950	739	1330	1210	448	365	309	242
15	260	578	4280	399	3640	755	1900	972	399	337	289	241
16	215	538	3280	374	2740	4610	3100	848	374	315	254	232
17	186	970	2340	373	2320	9110	3700	772	364	302	236	199
18	225	985	1810	364	2120	10200	3970	730	344	290	343	185
19	199	722	1320	320	2030	6540	3490	698	325	289	338	184
20	275	573	1120	260	1930	6170	2840	738	310	273	277	181
21	301	492	982	260	1740	8720	2530	908	290	273	232	177
22	415	453	1150	270	1480	8540	2970	1110	294	290	224	175
23	491	647	1000	280	1250	5880	5240	1330	459	278	215	203
24	513	1070	860	350	1120	4770	7010	1660	528	255	223	248
25	475	1840	800	418	1290	4650	4940	1590	468	251	211	306
26	364	1420	740	463	1410	5930	3340	1380	355	306	212	576
27	297	1040	720	560	1390	5930	2600	1200	339	322	198	558
28	260	1720	700	612	1280	4240	2150	1040	400	306	272	405
29	229	2770	680	620	1040	3380	1830	1170	353	290	330	326
30	212	2290	660	522	---	2710	1690	1330	316	268	284	274
31	196	---	640	441	---	2270	---	1080	---	245	240	---
TOTAL	7441	24890	65452	14233	59867	107080	81820	33097	13861	14270	10443	7726
MEAN	240	830	2111	459	2064	3454	2727	1068	462	460	337	258
MAX	513	2770	7690	620	5530	10200	7010	1660	917	1540	963	576
MIN	137	192	640	260	403	739	1330	698	290	245	198	175
CFSM	.20	.68	1.73	.38	1.69	2.83	2.24	.88	.38	.38	.28	.21
IN.	.23	.76	2.00	.43	1.83	3.27	2.50	1.01	.42	.44	.32	.24

CAL YR 1983 TOTAL 317101 MEAN 869 MAX 7990 MIN 132 CFSM .71 IN 9.68
WTR YR 1984 TOTAL 440180 MEAN 1203 MAX 10200 MIN 137 CFSM .99 IN 13.43

03351310 CROOKED CREEK AT INDIANAPOLIS, IN

LOCATION.--Lat 39°49'47", long 86°12'22", in NW¼SE¼ sec.16, T.16 N., R.3 E., Marion County, Hydrologic Unit 05120201, on left bank 150 ft downstream from 42nd Street bridge in Indianapolis, and at mile 1.0.

DRAINAGE AREA.--17.9 mi^2.

PERIOD OF RECORD.--June 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 711.00 ft National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark).

REMARKS.--Records fair except those for period of no gage-height record and winter periods, which are poor.

AVERAGE DISCHARGE.--15 years, 18.4 ft^3/s, 13.96 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,500 ft^3/s June 26, 1978, gage height, 13.31 ft; minimum daily, 0.47 ft^3/s Dec. 2, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 20	0915	470	4.85	Sept. 25	2045	470	4.85
Apr. 22	0930	*638	*5.37				

Minimum daily discharge, 0.53 ft^3/s Oct. 1.

NOTE.--No gage-height record Apr. 23 to May 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.53	2.3	20	5.5	5.0	13	15	17	8.1	3.1	1.7	1.0
2	.56	4.4	18	5.2	25	13	14	15	7.6	2.8	1.6	2.0
3	.56	6.2	21	5.0	68	14	27	16	6.9	2.8	1.5	8.2
4	1.5	3.2	130	5.2	21	16	38	45	6.1	35	3.9	2.6
5	10	2.7	55	6.0	12	37	67	35	5.8	20	3.0	3.3
6	1.8	2.5	62	6.4	9.4	33	30	50	5.6	7.4	3.0	3.0
7	.82	2.3	37	6.4	7.4	23	22	30	5.5	5.1	2.1	1.9
8	.63	2.2	27	6.1	6.4	18	18	22	5.0	3.6	2.9	1.5
9	.63	2.1	23	5.8	6.3	16	16	16	5.0	2.9	3.2	4.2
10	.90	41	23	5.5	6.5	14	14	14	4.7	2.5	2.0	7.8
11	3.1	69	188	5.3	6.8	13	14	13	4.3	2.6	6.5	3.8
12	2.0	19	151	5.1	25	12	17	20	4.0	2.7	2.7	2.8
13	12	13	47	4.8	56	15	21	15	13	2.1	1.6	2.3
14	3.8	10	44	4.6	38	13	15	13	31	2.0	1.3	16
15	1.4	11	33	4.4	32	25	33	11	7.3	2.0	1.2	7.4
16	.90	14	22	4.2	23	219	35	10	5.1	1.9	1.1	3.0
17	.74	11	16	3.8	20	96	27	8.5	4.4	1.9	1.1	2.1
18	26	9.1	14	2.5	20	58	29	7.5	3.9	1.8	1.3	1.8
19	8.0	8.1	12	2.1	20	40	22	7.0	3.7	1.7	1.1	1.6
20	47	11	10	2.0	17	192	18	100	3.5	1.9	.99	1.5
21	23	9.6	9.5	1.9	16	80	82	20	3.3	2.7	1.0	1.4
22	48	7.8	14	2.1	14	90	289	24	3.5	1.9	4.3	1.3
23	16	98	13	2.6	14	60	130	24	5.0	1.7	2.6	12
24	8.7	44	11	3.5	23	50	70	16	24	1.6	1.4	29
25	6.2	23	9.7	6.0	31	70	35	12	6.5	1.7	1.1	87
26	4.7	16	8.7	8.0	19	55	23	28	4.2	39	1.1	31
27	4.5	90	8.2	11	16	45	16	12	14	12	.99	7.4
28	3.5	104	7.8	7.8	15	12	13	19	5.8	4.7	6.9	4.9
29	20	36	7.3	5.4	14	24	10	13	4.1	2.9	2.9	3.7
30	5.0	25	6.5	4.9	---	19	25	10	3.4	2.2	1.6	3.4
31	2.4	---	5.8	6.0	---	17	---	9.1	---	1.8	1.2	---
TOTAL	264.87	697.5	1054.5	155.1	586.8	1402	1185	652.1	214.3	178.0	68.88	258.9
MEAN	8.54	23.3	34.0	5.00	20.2	45.2	39.5	21.0	7.14	5.74	2.22	8.63
MAX	48	104	188	11	68	219	289	100	31	39	6.9	87
MIN	.53	2.1	5.8	1.9	5.0	12	10	7.0	3.3	1.6	.99	1.0
CFSM	.48	1.30	1.90	.28	1.13	2.53	2.21	1.17	.40	.32	.12	.48
IN.	.55	1.45	2.19	.32	1.22	2.91	2.46	1.36	.45	.37	.14	.54

CAL YR 1983 TOTAL 5728.39 MEAN 15.7 MAX 261 MIN .50 CFSM .88 IN 11.90
WTR YR 1984 TOTAL 6717.95 MEAN 18.4 MAX 289 MIN .53 CFSM 1.03 IN 13.96

03351400 SUGAR CREEK NEAR MIDDLETOWN, IN

LOCATION.--Lat 40°02'27", long 85°31'30", in NW¼SE¼ sec.5, T.18 N., R.9 E., Henry County, Hydrologic Unit 05120201, on right bank 90 ft upstream from bridge on County Road 750 North, 1 mile southeast of Middletown.

DRAINAGE AREA.--5.80 mi^2.

PERIOD OF RECORD.--October 1968 to current year.

REVISED RECORDS.--WDR IN-75-1: 1969-74.

GAGE.--Water-stage recorder. Datum of gage is 950.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good above 1.0 ft^3/s, poor below and those for winter periods.

AVERAGE DISCHARGE.--16 years, 5.84 ft^3/s, 13.67 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,100 ft^3/s April 28, 1975, gage height, 7.72 ft; minimum daily, 0.02 ft^3/s Aug. 30 to Sept. 2, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 120 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 11	2245	154	5.36	Apr. 22	1015	155	5.37
Mar. 16	0315	*161	*5.42				

Minimum daily discharge 0.05 ft^3/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.52	5.2	1.3	.78	3.2	4.4	3.8	2.9	.52	.13	.22
2	.05	.63	4.4	1.3	5.6	3.0	5.9	3.4	2.6	.52	.13	.39
3	.05	.79	3.6	1.3	55	2.9	4.6	3.6	2.1	.57	.15	.63
4	.12	1.4	21	1.3	12	2.9	11	3.2	1.9	.75	.13	.31
5	.18	1.3	23	1.3	6.9	7.8	28	2.7	1.6	1.6	.15	.22
6	.14	.94	23	1.2	4.7	11	17	2.7	1.5	1.2	.15	.20
7	.13	.78	13	1.1	3.5	7.6	9.2	2.6	1.3	.75	.13	.17
8	.13	.64	8.2	1.0	2.4	6.0	7.0	2.4	1.1	.52	.13	.17
9	.13	.57	6.8	.98	1.6	3.9	5.8	2.3	1.0	.47	.13	.15
10	.13	12	6.5	.96	42	2.6	4.7	1.9	.97	.39	.13	.17
11	.13	37	74	.95	37	2.4	4.0	1.9	.89	.39	.17	.17
12	.14	15	80	.93	25	2.8	3.8	1.8	.82	.47	.19	.17
13	.26	8.0	29	.90	24	3.0	4.1	1.6	.75	.35	.17	.17
14	.21	5.3	22	.87	13	3.2	3.9	1.5	.75	.31	.17	.25
15	.16	6.8	16	.82	8.9	18	5.0	1.3	.75	.25	.17	.28
16	.15	12	9.1	.82	7.4	87	15	1.3	.75	.25	.15	.25
17	.15	7.2	6.9	.78	6.9	30	21	1.2	.75	.22	.17	.25
18	.34	5.4	5.7	.75	6.1	18	22	1.2	.75	.19	.19	.24
19	.22	4.3	4.8	.74	5.8	12	19	1.2	.75	.17	.19	.23
20	.40	4.2	4.0	.72	4.7	38	15	6.8	.69	.15	.19	.23
21	.36	4.5	3.6	.70	4.1	27	11	18	.57	.15	.19	.22
22	2.6	3.7	5.0	.68	3.6	18	80	8.9	.63	.15	.22	.21
23	3.7	20	3.0	.74	3.3	19	44	19	.97	.15	.17	.39
24	2.1	21	2.5	1.5	3.0	18	26	8.7	.82	.13	.17	.43
25	1.1	9.7	2.2	1.8	3.6	37	15	6.1	.63	.13	.17	.82
26	.80	6.3	2.0	3.0	6.0	23	10	4.7	.57	.17	.17	.75
27	.61	11	1.9	7.0	6.5	14	7.4	4.1	.57	.17	.17	.35
28	.56	34	1.7	3.0	5.0	11	5.7	4.4	.63	.15	.17	.22
29	.58	13	1.6	1.6	3.4	7.7	4.9	4.4	.57	.13	.17	.22
30	.52	7.2	1.5	1.3	---	5.9	4.7	3.8	.52	.13	.20	.22
31	.52	---	1.4	1.0	---	5.0	---	3.3	---	.13	.22	---
TOTAL	16.74	255.17	392.6	42.34	311.78	450.9	417.1	133.8	31.10	11.63	5.14	8.70
MEAN	.54	8.51	12.7	1.37	10.8	14.5	13.9	4.32	1.04	.38	.17	.29
MAX	3.7	37	80	7.0	55	87	80	19	2.9	1.6	.22	.82
MIN	.05	.52	1.4	.68	.78	2.4	3.8	1.2	.52	.13	.13	.15
CFSM	.09	1.47	2.19	.24	1.86	2.50	2.40	.75	.18	.07	.03	.05
IN.	.11	1.64	2.52	.27	2.00	2.89	2.67	.86	.20	.07	.03	.06

CAL YR 1983 TOTAL 1710.84 MEAN 4.69 MAX 121 MIN .05 CFSM .81 IN 10.97
WTR YR 1984 TOTAL 2077.00 MEAN 5.67 MAX 87 MIN .05 CFSM .98 IN 13.32

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03351500 FALL CREEK NEAR FORTVILLE, IN

LOCATION.--Lat 39°57'15", long 85°52'05", in NW¼NE¼ sec.5, T.17 N., R.6 E., Hamilton County, Hydrologic Unit 05120201, on right bank 100 ft downstream from bridge on State Highway 238, 0.2 mile downstream from Lick Creek, 2 miles northwest of Fortville, and at mile 26.1.

DRAINAGE AREA.--169 mi².

PERIOD OF RECORD.--July 1941 to current year.

REVISED RECORDS.--WSP 1435: 1949(P). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 787.43 ft National Geodetic Vertical Datum of 1929 (levels by Indianapolis Water Co.). Prior to June 27, 1942, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--43 years, 166 ft³/s, 13.34 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,750 ft³/s Apr. 21, 1964, gage height, 9.88 ft; minimum daily, 5.0 ft³/s Sept. 23, 24, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 12 ft March 1913 (information by local resident).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,300 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 12	2300	1670	6.42	Apr. 23	1100	*1670	*6.43
Mar. 17	0500	1580	6.29				

Minimum daily discharge, 15 ft³/s Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	40	222	98	78	156	269	258	157	61	36	27
2	16	44	181	96	88	155	253	255	147	59	36	27
3	17	55	165	96	626	147	251	226	135	55	38	67
4	17	54	318	98	478	143	313	242	126	69	40	88
5	35	51	492	114	289	176	456	224	118	168	42	55
6	35	49	470	105	200	289	500	217	114	119	43	41
7	27	47	418	100	151	268	376	215	108	88	39	38
8	23	43	298	94	120	238	313	206	103	72	43	33
9	24	42	230	91	110	195	279	194	99	64	42	31
10	24	101	219	93	355	184	253	187	94	62	40	33
11	25	633	552	81	909	172	233	179	87	59	41	35
12	26	453	1420	75	610	154	216	179	83	59	48	35
13	46	265	1160	70	601	154	230	170	82	55	46	33
14	53	189	634	65	317	145	217	163	94	52	39	32
15	39	159	520	62	392	160	236	154	82	48	35	34
16	32	206	381	60	333	1010	342	148	79	48	33	34
17	29	203	298	60	303	1220	520	142	78	47	32	32
18	44	156	252	54	280	675	497	140	74	44	41	30
19	58	144	200	50	269	502	421	138	72	44	44	29
20	57	127	185	50	242	654	386	163	70	42	35	28
21	88	121	172	50	214	975	338	391	68	47	31	28
22	92	112	180	60	185	730	722	325	66	46	31	27
23	137	176	160	70	172	589	1400	453	113	42	38	27
24	99	448	150	86	167	556	881	362	128	40	38	36
25	75	313	130	104	180	561	594	277	102	39	33	46
26	61	224	125	108	201	730	458	245	79	46	31	112
27	54	206	120	162	207	537	381	207	73	56	29	114
28	50	546	115	121	196	459	325	201	73	51	42	74
29	47	453	110	100	178	389	286	228	67	43	41	59
30	44	296	105	90	—	327	284	191	65	40	34	51
31	42	—	100	80	—	293	—	172	—	38	30	—
TOTAL	1431	5972	10082	2643	8651	12943	12230	6852	2836	1806	1171	1336
MEAN	46.2	199	325	85.3	298	418	408	221	94.5	58.3	37.8	44.5
MAX	137	633	1420	162	909	1220	1400	453	157	168	48	114
MIN	15	40	100	50	78	143	216	138	65	38	29	27
CFSM	.27	1.18	1.92	.51	1.76	2.47	2.41	1.31	.56	.35	.22	.26
IN.	.31	1.31	2.22	.58	1.90	2.85	2.69	1.51	.62	.40	.26	.29

CAL YR 1983 TOTAL 47638 MEAN 131 MAX 1810 MIN 12 CFSM .78 IN 10.49
WTR YR 1984 TOTAL 67953 MEAN 186 MAX 1420 MIN 15 CFSM 1.10 IN 14.96

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03352500 FALL CREEK AT MILLERSVILLE, IN

LOCATION.--Lat 39°51'07", long 86°05'15", in NE¼NE¼ sec.9, T.16 N., R.4 E., Marion County, Hydrologic Unit 05120201, on right bank at downstream side of Emerson Way bridge at Millersville, and 9.2 miles upstream from mouth.

DRAINAGE AREA.--298 mi².

PERIOD OF RECORD.--October 1929 to current year. Monthly discharges only for some periods, published in WSP 1305. Twice-daily chain gage readings at former site from July 1925 to September 1926 are available in the district office.

REVISED RECORDS.--WSP 1335: 1930-31, 1933, 1936-38, 1942-43. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 722.16 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 21, 1961, water-stage recorder at site 500 ft downstream at same datum.

REMARKS.--Records good. Flow regulated by Geist Reservoir.

AVERAGE DISCHARGE.--55 years, 283 ft³/s, 12.90 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,900 ft³/s May 28, 1956, gage height, 13.53 ft; minimum daily, 7.8 ft³/s Sept. 28, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 16.3 ft Mar. 26, 1913, from floodmarks, discharge, 22,000 ft³/s by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,510 ft³/s Mar. 17, gage height, 7.54 ft; minimum daily, 46 ft³/s Oct. 2,3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	54	399	155	115	214	458	400	261	67	58	57
2	47	63	325	150	128	210	425	352	238	66	61	57
3	47	72	290	145	599	197	432	341	221	68	66	72
4	53	69	557	150	844	201	522	382	189	125	82	62
5	62	64	792	151	544	242	734	351	158	335	82	69
6	55	64	863	148	357	370	798	365	150	310	66	67
7	52	62	823	144	244	432	680	344	143	200	66	66
8	52	62	629	135	199	394	554	307	126	131	70	61
9	52	62	467	129	179	319	484	286	138	95	75	59
10	52	146	391	139	184	283	441	274	126	87	69	63
11	51	273	852	124	1080	256	378	260	125	81	129	62
12	51	156	1960	114	1130	231	360	274	101	80	82	64
13	89	115	2040	114	1050	238	388	245	110	67	64	64
14	69	94	1340	112	953	219	360	247	201	64	57	83
15	55	99	974	109	727	252	419	209	146	62	54	71
16	50	108	733	105	589	2030	554	191	108	61	58	62
17	49	102	554	100	510	2400	815	188	96	62	64	59
18	59	95	449	96	459	1530	861	183	91	67	65	61
19	58	90	365	90	429	1020	758	178	88	60	61	63
20	120	94	311	80	388	1500	650	236	85	65	57	63
21	114	91	292	80	346	1820	718	610	83	70	56	60
22	98	82	310	80	304	1490	1710	600	72	66	71	56
23	80	179	270	90	272	1190	2090	722	85	61	73	84
24	61	265	250	100	267	978	1810	687	141	61	60	91
25	65	370	230	120	296	951	1160	504	138	76	59	168
26	62	341	210	137	304	1070	827	476	113	125	63	226
27	60	369	200	199	401	956	665	369	109	112	61	82
28	60	811	190	194	304	844	558	360	106	66	88	58
29	59	802	180	165	255	665	471	407	95	67	75	55
30	54	576	170	152	---	568	412	350	81	58	67	51
31	54	---	160	128	---	508	---	301	---	55	59	---
TOTAL	1938	5830	17576	3935	13457	23578	21492	10999	3924	2968	2118	2216
MEAN	62.5	194	567	127	464	761	716	355	131	95.7	68.3	73.9
MAX	120	811	2040	199	1130	2400	2090	722	261	335	129	226
MIN	47	54	160	80	115	197	360	178	72	55	54	51
CFSM	.21	.65	1.90	.43	1.56	2.55	2.40	1.19	.44	.32	.23	.25
IN.	.24	.73	2.19	.49	1.68	2.94	2.68	1.37	.49	.37	.26	.28

CAL YR 1983 TOTAL 84711 MEAN 232 MAX 2900 MIN 41 CFSM .78 IN 10.57
WTR YR 1984 TOTAL 110031 MEAN 301 MAX 2400 MIN 47 CFSM 1.01 IN 13.74

03353000 WHITE RIVER AT INDIANAPOLIS, IN

LOCATION.--Lat 39°45'05", long 86°10'30", in NW¼NW¼ sec.14, T.15 N., R.3 E., Marion County, Hydrologic Unit 05120201, on downstream side of second pier from right bank of Morris Street bridge in Indianapolis, 2.6 miles downstream from Fall Creek, 3.4 miles upstream from Eagle Creek, and at mile 230.3.

DRAINAGE AREA.--1,635 mi^2.

PERIOD OF RECORD.--March 1904 to July 1906 and April 1930 to current year. Gage-height record published in reports of National Weather Service for site 1.1 miles upstream Feb. 8, 1911, to Mar. 25, 1913, and at site 2.3 miles upstream since Oct. 16, 1913. Prior to October 1948, published as West Fork White River at Indianapolis.

REVISED RECORDS.--WSP 1335: 1932-33, 1937, 1939-41. WSP 1505: 1938. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 662.26 ft National Geodetic Vertical Datum of 1929. March 1904 to July 1906, nonrecording gage at railroad bridge 0.8 mile upstream at datum approximately 2.9 ft higher. April 1930 to July 20, 1931, nonrecording gage at Indianapolis sanitation plant, 2.5 miles downstream at datum 660.00 ft lower. July 21, 1931 to Mar. 2, 1932, nonrecording gage and March 3, 1932, to September 30, 1960, water-stage recorder at present site at datum 660.00 ft lower.

REMARKS.--Records good. Natural flow affected by regulation of Morse Reservoir and Geist Reservoir, and by diversion of municipal water supply by the Indianapolis Water Company.

AVERAGE DISCHARGE.--55 years (water years 1905, 1931 to current year), 1,393 ft^3/s, 11.57 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,200 ft^3/s May 18, 1943; maximum gage height, 21.57 ft Jan. 16, 1937; minimum daily discharge, 8.0 ft^3/s Sept. 29, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 30.0 ft, from floodmarks determined by Indianapolis Water Company, discharge, 70,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 8,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 13	2000	9800	10.73	Mar. 22	0300	11400	11.49
Mar. 17	2200	*12400	*11.99	Apr. 24	0900	9120	10.38

Minimum daily discharge, 97 ft^3/s Oct. 2,3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	155	2150	700	456	1150	2460	2040	1150	305	181	192
2	97	169	1570	680	469	1110	2140	1750	1000	278	180	169
3	97	197	1340	660	1690	1090	2160	1670	908	304	183	288
4	139	171	2340	650	3720	1070	2390	1780	812	867	229	290
5	293	168	2930	660	3470	1270	3390	1580	706	1960	546	328
6	130	169	4120	666	2110	1490	3930	1710	636	1880	997	281
7	115	160	4770	623	1370	1770	4190	1460	610	1320	546	228
8	113	151	4200	596	881	1750	3260	1350	571	1060	421	198
9	113	147	2950	557	774	1520	2590	1210	522	691	430	201
10	110	445	2290	571	1270	1300	2170	1130	489	484	498	276
11	107	1380	2410	494	4270	1170	1910	1070	457	410	652	224
12	114	1710	7680	450	6560	1050	1760	1170	415	379	469	207
13	312	1530	9530	426	6630	1080	1800	1450	374	333	340	211
14	171	966	8530	450	6320	979	1700	1480	728	264	273	388
15	202	712	5760	447	4770	1090	2150	1190	528	237	237	314
16	185	605	4340	410	3510	7780	3410	1030	446	227	211	237
17	157	753	3180	388	2910	11400	4380	924	410	205	203	202
18	182	1120	2450	390	2590	12100	4850	860	406	206	205	176
19	193	836	1900	340	2490	6560	4590	814	362	192	305	165
20	698	693	1560	284	2300	8450	3580	1400	362	185	263	171
21	549	567	1440	286	2060	10800	3710	1990	290	202	210	169
22	595	476	1770	294	1760	10500	6350	1960	264	198	411	152
23	500	1430	1690	309	1530	7710	7300	2310	270	194	285	469
24	477	1450	1200	381	1430	6060	8690	2250	680	175	199	523
25	437	1990	1000	448	1630	5860	6870	2160	616	169	179	792
26	340	1930	940	472	1640	6760	4640	2100	447	788	173	1280
27	262	1840	880	614	1720	7230	3600	1630	723	467	179	694
28	224	2720	840	667	1620	5520	3090	1680	467	311	228	481
29	196	3370	800	678	1370	4300	2520	1510	432	285	306	336
30	186	3150	760	596	---	3420	2300	1600	355	235	286	267
31	166	---	720	485	---	2830	---	1460	---	188	228	---
TOTAL	7558	31160	88040	15672	73320	138169	107870	47718	16436	14999	10053	9869
MEAN	244	1039	2840	506	2528	4457	3596	1539	548	484	324	329
MAX	698	3370	9530	700	6630	12100	8690	2310	1150	1960	997	1280
MIN	97	147	720	284	456	979	1700	814	264	169	173	152
CFSM	.15	.64	1.74	.31	1.55	2.73	2.20	.94	.34	.30	.20	.20
IN.	.17	.71	2.00	.36	1.67	3.14	2.45	1.09	.37	.34	.23	.22

CAL YR 1983 TOTAL 398483 MEAN 1092 MAX 10800 MIN 97 CFSM .67 IN 9.07
WTR YR 1984 TOTAL 560864 MEAN 1532 MAX 12100 MIN 97 CFSM .94 IN 12.76

03353120 PLEASANT RUN AT ARLINGTON AVENUE AT INDIANAPOLIS, IN

LOCATION.--Lat 39°46'33", long 86°03'50", in SW¼NW¼ sec.2, T.15 N., R.4 E., Marion County, Hydrologic Unit 05120201, on right bank 46 ft upstream from Arlington Avenue bridge in Indianapolis, 0.5 mile downstream from small left-bank tributary, and at mile 7.9.

DRAINAGE AREA.--7.58 mi².

PERIOD OF RECORD.--December 1959 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 780.00 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--24 years (water years 1961 to current year), 7.67 ft³/s, 13.74 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,600 ft³/s June 25, 1978, gage height, 13.86 ft; no flow at times in 1960-62.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1956 reached a stage of 16.0 ft, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 450 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 16	0130	587	6.53	July 5	0915	*1100	*8.60
Apr. 22	0730	480	6.04	Aug. 10	1900	556	6.39

Minimum daily discharge, 0.17 ft³/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	1.2	3.0	1.7	18	5.5	2.5	3.4	2.2	.54	.91	.69
2	.21	7.7	4.2	1.8	47	8.3	2.2	2.8	1.9	.54	.94	.66
3	.17	3.4	7.8	1.7	36	8.0	14	8.0	1.4	23	.97	9.6
4	12	1.4	63	1.7	5.0	6.1	14	3.0	1.2	47	17	1.1
5	39	.96	10	1.7	3.1	26	17	3.8	1.1	211	4.1	7.0
6	1.6	.90	17	2.2	2.0	13	6.6	16	1.1	11	1.6	1.3
7	.83	.87	8.5	1.9	1.4	8.7	4.1	4.6	1.3	4.5	1.2	.86
8	.72	.86	7.1	1.6	1.2	6.5	3.2	3.9	1.0	2.5	14	.75
9	.79	.86	6.2	2.4	1.4	5.4	3.2	2.8	.98	1.8	5.3	7.2
10	.75	68	10	2.1	30	4.6	2.6	2.4	1.4	1.8	61	3.4
11	.67	32	85	1.9	13	3.9	2.3	2.2	.90	3.6	13	1.0
12	2.3	5.8	39	1.8	9.7	3.2	11	6.1	1.6	1.7	3.5	.82
13	31	3.0	12	1.7	25	8.6	5.8	2.3	17	1.4	1.7	.72
14	4.3	2.3	16	1.5	8.4	6.7	8.0	1.9	7.2	1.1	1.1	22
15	1.1	11	8.2	1.3	5.5	34	32	1.7	1.9	1.0	.94	3.0
16	.84	6.8	5.1	1.1	4.4	120	19	1.5	1.1	.95	.91	1.1
17	.65	3.6	3.9	1.0	4.2	16	17	1.3	1.1	1.3	.85	.87
18	2.0	2.5	2.9	.95	3.8	12	14	1.1	.89	1.1	1.2	.92
19	.86	2.8	2.5	.90	4.0	8.1	7.8	1.1	1.1	.82	.76	.73
20	55	8.9	2.2	.80	2.9	69	5.9	72	1.2	2.7	.67	.72
21	9.0	3.4	2.4	.80	2.5	19	66	21	1.2	1.2	1.0	.68
22	18	2.2	3.0	1.0	2.3	23	129	33	.94	.82	28	.69
23	8.2	66	2.5	1.2	2.1	12	21	35	1.3	.86	3.0	37
24	2.6	12	2.3	4.0	5.9	7.9	12	7.3	18	.78	1.2	13
25	1.6	5.3	2.2	2.5	12	14	7.6	7.7	.78	3.2	.88	49
26	1.3	3.4	2.1	3.0	5.7	7.5	5.7	14	.66	56	.82	13
27	1.1	55	2.0	2.6	4.6	7.9	4.7	3.8	5.3	6.5	.76	3.3
28	1.3	23	2.0	2.1	5.1	6.0	4.7	21	.76	6.1	12	1.7
29	1.2	7.0	1.8	1.6	5.5	4.6	4.7	6.6	.63	2.4	1.6	1.2
30	1.0	4.2	1.6	2.1	---	3.4	9.6	3.8	.53	1.2	1.8	.93
31	1.0	---	1.5	1.8	---	2.8	---	2.7	---	.97	1.2	---
TOTAL	201.29	346.35	337.0	54.45	271.7	481.7	457.2	303.8	77.67	399.38	183.91	184.94
MEAN	6.49	11.5	10.9	1.76	9.37	15.5	15.2	9.80	2.59	12.9	5.93	6.16
MAX	55	68	85	4.0	47	120	129	72	18	211	61	49
MIN	.17	.86	1.5	.80	1.2	2.8	2.2	1.1	.53	.54	.67	.66
CFSM	.86	1.52	1.44	.23	1.24	2.05	2.01	1.29	.34	1.70	.78	.81
IN.	.99	1.70	1.65	.27	1.33	2.36	2.24	1.49	.38	1.96	.90	.91

CAL YR 1983 TOTAL 2410.20 MEAN 6.60 MAX 85 MIN .17 CFSM .87 IN 11.83
WTR YR 1984 TOTAL 3299.39 MEAN 9.01 MAX 211 MIN .17 CFSM 1.19 IN 16.19

03353180 BEAN CREEK AT INDIANAPOLIS, IN

LOCATION.--Lat 39°43'45", long 86°07'14", in NW¼SW¼ sec.20, T.15 N., R.4 E., Marion County, Hydrologic Unit 05120201, on left bank 80 ft upstream from Keystone Avenue bridge and west edge of Sarah Shank Golf Course in Indianapolis, and at mile 1.8.

DRAINAGE AREA.--4.40 mi².

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 735.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--14 years, 5.14 ft³/s, 15.86 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 770 ft³/s June 25, 1978, gage height, 7.77 ft; minimum daily, 0.38 ft³/s Oct. 2, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 120 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 16	0015	*276	*4.89	July 5	0745	130	3.66
Apr. 22	0715	189	4.19	July 26	1300	230	4.54
May 20	1800	140	3.75	July 28	1215	234	4.57
May 22	2315	180	4.11	Sept. 25	1900	125	3.61
July 3	2215	184	4.15				

Minimum daily discharge, 0.38 ft³/s Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.44	1.6	3.2	2.4	1.7	2.7	4.1	3.9	3.8	2.0	2.1	1.8
2	.38	2.6	3.4	2.4	3.1	2.8	4.2	3.8	3.5	2.1	2.1	1.4
3	.41	2.2	3.8	2.4	8.2	3.0	8.4	5.3	3.0	20	2.1	6.2
4	2.9	1.5	22	2.4	2.7	3.2	8.1	7.5	2.7	18	14	1.6
5	10	1.4	5.6	2.4	2.3	12	8.9	4.3	2.9	29	2.8	3.0
6	1.2	1.3	7.6	2.9	2.1	6.8	5.4	11	3.0	3.7	2.3	1.7
7	.97	1.4	5.0	2.3	1.9	5.4	4.4	4.9	2.8	2.4	2.2	1.6
8	.85	1.6	4.6	2.2	1.8	4.8	4.0	4.5	2.8	2.1	3.6	1.6
9	.80	1.5	4.0	3.2	2.0	4.1	4.1	3.9	2.7	1.9	2.2	4.8
10	1.0	28	5.5	3.4	8.1	3.6	4.0	3.7	2.5	1.8	4.8	2.2
11	.97	13	32	2.2	6.1	3.3	3.7	3.7	2.5	2.8	3.0	1.8
12	1.6	3.6	15	2.3	4.7	3.2	6.7	3.8	2.6	2.3	1.8	1.7
13	8.4	2.9	6.5	2.2	13	3.5	4.8	3.5	7.1	1.6	1.8	1.6
14	2.0	2.6	7.9	2.0	4.9	3.8	3.7	3.1	4.7	1.6	1.8	10
15	1.3	5.4	5.1	2.0	3.8	21	7.3	3.0	2.8	1.6	1.9	2.6
16	1.0	3.9	4.0	2.0	3.6	54	7.0	3.0	2.5	1.8	1.8	1.9
17	1.0	2.9	3.6	1.9	3.7	11	7.3	2.9	2.3	4.9	1.9	1.9
18	1.5	2.6	3.5	1.7	3.5	8.0	7.0	2.9	2.3	2.3	1.8	2.2
19	1.2	2.7	3.5	1.6	3.6	6.9	5.4	2.8	2.5	2.0	1.6	2.2
20	20	4.0	3.4	1.5	3.1	45	4.3	36	2.5	2.5	1.7	2.2
21	4.9	2.6	3.3	1.4	3.0	14	27	12	2.5	1.7	1.7	2.0
22	6.3	2.5	4.0	1.5	2.8	15	62	27	2.4	1.6	7.5	1.9
23	3.8	25	3.2	1.7	2.7	8.8	14	30	3.1	1.6	1.9	11
24	2.0	5.8	3.0	2.0	4.6	6.6	9.5	7.4	5.2	1.7	1.8	3.3
25	1.8	3.7	2.9	2.4	6.0	9.1	7.1	7.2	2.2	2.7	1.6	23
26	1.7	3.0	2.8	2.8	3.8	6.2	5.9	9.4	2.7	24	1.4	5.0
27	1.7	21	2.7	3.3	3.4	6.7	5.4	4.8	4.2	3.1	1.5	1.8
28	1.6	9.8	2.6	2.4	3.2	5.6	5.2	11	2.4	15	2.8	1.6
29	1.6	4.6	2.5	1.9	3.0	5.0	4.7	5.3	2.2	2.6	1.8	1.4
30	1.3	3.7	2.5	1.8	---	4.6	6.0	4.5	1.9	2.3	1.7	1.2
31	1.5	---	2.4	1.7	---	4.5	---	4.2	---	2.2	1.7	---
TOTAL	86.12	168.4	181.1	68.3	116.4	294.2	259.6	240.3	90.3	164.9	82.7	106.2
MEAN	2.78	5.61	5.84	2.20	4.01	9.49	8.65	7.75	3.01	5.32	2.67	3.54
MAX	20	28	32	3.4	13	54	62	36	7.1	29	14	23
MIN	.38	1.3	2.4	1.4	1.7	2.7	3.7	2.8	1.9	1.6	1.4	1.2
CFSM	.63	1.28	1.33	.50	.91	2.16	1.97	1.76	.68	1.21	.61	.81
IN.	.73	1.42	1.53	.58	.98	2.49	2.19	2.03	.76	1.39	.70	.90

CAL YR 1983 TOTAL 1377.69 MEAN 3.77 MAX 44 MIN .38 CFSM .86 IN 11.65
WTR YR 1984 TOTAL 1858.52 MEAN 5.08 MAX 62 MIN .38 CFSM 1.16 IN 15.71

03353200 EAGLE CREEK AT ZIONSVILLE, IN

LOCATION.--Lat 39°56'56", long 86°15'22", in SW¼NW¼ sec.1, T.17 N., R.2 E., Boone County, Hydrologic Unit 05120201, on downstream side of second pier from right bank of bridge on State Highway 334 at Zionsville, 200 ft upstream from Long Branch, and at mile 24.7.

DRAINAGE AREA.--103 mi².

PERIOD OF RECORD.--October 1957 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 816.85 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 9, 1957, nonrecording gage at same site and datum.

REMARKS.--Records fair. Low flow is affected by the Zionsville well field located on the right bank below the gage.

AVERAGE DISCHARGE.--27 years, 99.6 ft³/s, 13.13 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,400 ft³/s Apr. 20, 1964, gage height, 14.64 ft; no flow at times during 1959, 1963-68, 1970, 1971, 1983, 1984.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 19.20 ft, from floodmark.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 11	2200	1670	7.05	Mar. 20	1200	2130	7.55
Feb. 3	0600	unknown	8.49	Apr. 22	1200	1880	7.10
Mar. 16	0700	*2750	*8.54				

Minimum daily discharge, no flow Oct. 1-12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	8.3	87	22	8.6	56	106	92	34	12	4.1	1.1
2	.00	7.7	74	20	40	52	92	79	32	10	3.6	1.0
3	.00	7.8	66	19	800	50	101	75	30	9.5	3.4	1.3
4	.00	7.1	263	20	200	56	193	76	26	126	3.4	1.5
5	.00	7.1	375	24	100	68	517	66	25	334	22	1.9
6	.00	9.7	614	25	73	80	289	64	23	117	21	1.6
7	.00	7.2	379	24	52	84	167	62	22	62	13	1.3
8	.00	7.6	220	23	39	80	125	57	21	33	23	1.0
9	.00	7.3	154	22	49	80	106	53	20	22	49	1.4
10	.00	14	147	21	490	68	90	48	18	18	27	2.7
11	.00	64	1060	20	647	58	79	45	16	15	189	3.0
12	.00	45	1010	19	535	54	73	56	14	13	65	2.4
13	.49	23	488	18	768	50	97	50	17	11	30	2.2
14	.83	18	421	17	465	47	90	45	128	9.0	17	5.3
15	.42	17	343	16	307	108	182	40	61	7.5	10	4.7
16	.34	20	196	15	231	2190	349	37	34	7.1	6.0	3.5
17	.23	24	131	15	201	1110	297	34	27	6.0	4.0	2.9
18	4.2	22	105	14	181	682	295	32	23	5.3	3.0	2.5
19	2.7	21	84	13	197	513	205	31	18	4.8	2.3	2.1
20	13	22	70	13	153	1480	150	39	16	4.3	1.8	1.8
21	16	22	62	14	125	797	247	50	14	4.7	1.6	1.4
22	46	19	110	16	106	600	1210	45	15	4.4	1.5	1.2
23	35	53	78	17	92	522	669	61	54	3.8	1.4	2.1
24	16	87	68	18	85	470	437	56	128	3.2	1.4	2.4
25	13	51	50	17	92	558	295	47	39	3.2	1.3	7.2
26	8.7	33	39	15	79	474	197	69	25	14	1.1	17
27	7.9	91	34	24	68	354	150	50	38	14	1.0	10
28	7.4	454	30	19	60	307	122	51	25	11	2.6	6.0
29	8.3	231	27	14	56	217	101	51	17	9.5	3.9	4.3
30	13	125	25	13	---	153	122	43	13	5.9	2.5	3.3
31	10	---	23	10	---	122	---	39	---	4.3	1.4	---
TOTAL	203.51	1525.8	6833	557	6299.6	11540	7153	1643	973	904.5	517.3	100.1
MEAN	6.56	50.9	220	18.0	217	372	238	53.0	32.4	29.2	16.7	3.34
MAX	46	454	1060	25	800	2190	1210	92	128	3[illegible]	189	17
MIN	.00	7.1	23	10	8.6	47	73	31	13	3.2	1.0	1.0
CFSM	.06	.49	2.14	.18	2.11	3.61	2.31	.52	.32	.28	.16	.03
IN.	.07	.55	2.47	.20	2.28	4.17	2.58	.59	.35	.33	.19	.04

CAL YR 1983 TOTAL 28670.12 MEAN 78.5 MAX 1330 MIN .00 CFSM .76 IN 10.35
WTR YR 1984 TOTAL 38249.81 MEAN 105 MAX 2190 MIN .00 CFSM 1.02 IN 13.81

03353450 EAGLE CREEK RESERVOIR NEAR INDIANAPOLIS, IN

LOCATION.--Lat 39°49'20", long 86°18'11", in NW¼NW¼ sec. 22, T.16 N., R.2 E., Marion County, Hydrologic Unit 05120201, in outlet structure of reservoir on Eagle Creek, 800 ft upstream from Interstate Highway 74, 0.5 mile downstream from School Branch, 1.0 mile northeast of Clermont, and 2 miles west of Indianapolis.

DRAINAGE AREA.--162 mi².

PERIOD OF RECORD.--March 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 780.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by earth-fill dam. Low flow is controlled through a 48-inch diameter conduit. Spillway elevation, 783 ft is an ogee section with 6 taintor gates, each 40 ft wide and 25 ft high. Permanent pool capacity is 24,000 acre-ft, elevation, 790.00 ft. Reservoir is used for flood control, low-flow maintenance, water supply, and recreation. Reservoir put into operation Nov. 27, 1969.

COOPERATION.--Water-stage recorder graph and capacity tables furnished by Indianapolis Flood Control District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 27,350 acre-ft June 26, 1978, elevation, 792.39 ft; minimum, 13,750 acre-ft Nov. 28, 1971, elevation, 781.25 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 25,190 acre-ft Mar. 16, elevation, 790.85 ft; minimum, 19,180 acre-ft Oct. 19, elevation, 786.23 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	786.76	19,810	
Oct. 31	786.58	19,600	-210
Nov. 30	789.83	23,780	+4,180
Dec. 31	789.90	23,870	+90
CAL YR 1983			-100
Jan. 31	789.10	22,830	-1,040
Feb. 29	790.08	24,110	+1,280
Mar. 31	790.10	24,140	+30
Apr. 30	790.08	24,110	-30
May 31	789.96	23,950	-160
June 30	790.04	24,060	+110
July 31	789.60	23,480	-580
Aug. 31	789.14	22,880	-600
Sept. 30	788.73	22,350	-530
WTR YR 1984			+2,540

03353500 EAGLE CREEK AT INDIANAPOLIS, IN

LOCATION.--Lat 39°46'33", long 86°15'01", in NW¼NW¼ sec.6, T.15 N., R.3 E., Marion County, Hydrologic Unit 05120201, on right bank at downstream side of bridge on Lynhurst Drive, approximately 600 ft south of intersection of West 10th Street and Lynhurst Drive, 0.5 mile downstream from West 10th Street bridge, 1.0 mile upstream from Vermont Street bridge, 3.0 miles upstream from Little Eagle Creek, and 7.1 miles upstream from mouth.

DRAINAGE AREA.--174 mi².

PERIOD OF RECORD.--November 1938 to current year.

REVISED RECORDS.--WSP 953: 1939. WSP 1625: 1958. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 699.00 ft National Geodetic Vertical Datum of 1929. Aug. 8, 1957 to June 30, 1958, temporary site during reconstruction of bridge on Lynhurst Drive, a nonrecording gage on downstream side of 10th Street bridge. Mar. 10, 1966 to Aug. 16, 1967, during channelization of Eagle Creek, a nonrecording gage on downstream side of Lynhurst Drive bridge. Prior to Oct. 1, 1967, at datum 7.21 ft higher.

REMARKS.--Records good. Flow regulated since November 1969 by Eagle Creek Reservoir, 4.7 miles upstream (See sta 03353450).

AVERAGE DISCHARGE.--45 years (water years 1940 to current year), 155 ft³/s, 12.11 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,800 ft³/s June 28, 1957, gage height, 23.59 ft present datum from rating curve extended above 9,000 ft³/s on basis of a combined current-meter measurement and slope-area measurement; no flow for several days in August 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 23.2 ft present datum, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,220 ft³/s Mar. 16, gage height, 7.49 ft; minimum daily, 3.2 ft³/s Sept. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.8	8.9	31	54	49	340	186	158	43	12	11	4.5
2	9.0	12	31	49	49	84	141	85	39	11	11	3.9
3	8.4	11	110	49	100	51	219	175	37	13	15	7.4
4	11	9.9	334	49	200	146	263	206	36	19	12	4.6
5	14	9.2	380	49	220	141	683	178	35	326	13	6.2
6	12	9.2	814	49	100	163	445	190	35	130	12	4.5
7	12	9.0	562	49	80	177	235	93	35	115	11	4.0
8	12	8.4	222	49	65	166	192	153	34	13	14	3.6
9	12	8.3	281	49	60	128	171	69	33	13	12	5.7
10	12	34	118	49	340	153	159	64	34	12	11	4.8
11	11	31	1380	49	250	80	94	106	34	14	11	3.7
12	10	11	1850	49	600	82	180	86	34	12	9.0	3.7
13	16	8.8	778	49	1200	145	140	62	15	12	8.3	3.3
14	9.4	8.8	652	49	991	63	134	164	15	11	7.3	8.5
15	9.2	9.7	485	49	427	217	215	59	15	11	7.7	4.5
16	9.2	11	265	49	293	3770	417	59	15	11	7.4	3.7
17	9.2	11	234	49	268	2020	374	57	15	11	7.6	3.9
18	10	9.7	147	49	251	1180	379	57	15	11	7.8	3.4
19	9.4	9.4	58	49	279	804	318	53	17	11	7.4	3.4
20	28	10	279	49	158	2120	285	85	16	11	7.3	3.4
21	14	9.6	159	49	199	1450	472	161	15	11	7.4	3.2
22	19	9.2	148	49	132	905	2130	51	16	10	13	3.4
23	10	47	72	49	139	725	1270	156	15	10	7.7	19
24	9.8	19	60	49	174	747	653	44	102	9.3	7.1	14
25	9.2	14	60	49	193	718	479	97	12	12	7.5	48
26	8.4	12	200	49	73	777	377	182	11	68	5.1	23
27	7.6	40	62	49	219	413	206	59	108	19	4.2	9.0
28	7.3	37	62	49	85	398	269	173	14	16	4.2	6.4
29	7.5	22	62	49	80	301	176	56	13	15	4.2	5.5
30	8.1	20	62	49	---	186	243	48	12	12	4.2	5.5
31	8.4	---	62	49	---	176	---	135	---	12	4.2	---
TOTAL	341.9	470.1	10020	1524	7274	18826	11505	3321	872	973.3	271.6	227.7
MEAN	11.0	15.7	323	49.2	251	607	384	107	29.1	31.4	8.76	7.59
MAX	28	47	1850	54	1200	3770	2130	206	108	326	15	48
MIN	7.3	8.3	31	49	49	51	94	44	11	9.3	4.2	3.2
CFSM	.06	.09	1.86	.28	1.44	3.49	2.21	.62	.17	.18	.05	.04
IN.	.07	.10	2.14	.33	1.56	4.02	2.46	.71	.19	.21	.06	.05

CAL YR 1983 TOTAL 45099.9 MEAN 124 MAX 2200 MIN 7.3 CFSM .71 IN 9.64
WTR YR 1984 TOTAL 55626.6 MEAN 152 MAX 3770 MIN 3.2 CFSM .87 IN 11.89

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03353600 LITTLE EAGLE CREEK AT SPEEDWAY, IN

LOCATION.--Lat 39°47'15", long 86°13'41", in NE¼SW¼ sec.32, T.16 N., R.3 E., Marion County, Hydrologic Unit 05120201, on right bank at upstream side of 16th Street bridge in Speedway, 0.6 mile upstream from Dry Run, and 2.3 miles upstream from mouth.

DRAINAGE AREA.--23.9 mi² including 5.57 mi² from Dry Run basin. Since June 1964 part of the flow from the 5.57 mi² of Dry Run basin has been diverted into Little Eagle Creek above gage.

PERIOD OF RECORD.--October 1959 to current year. Figures of runoff for June 1964 to September 1966 have been found to be in error and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 707.82 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to June 13, 1975, at datum 3.00 ft higher.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--20 years (water years 1965 to current year) 20.8 ft³/s, 11.82 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,330 ft³/s July 28, 1979, gage height, 12.13 ft; no flow at times in 1960-64, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 450 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 16	1150	*1150	*7.04	Sept. 25	1900	584	5.27
Apr. 22	0730	493	4.94				

Minimum daily discharge, 0.39 ft³/s Oct. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.58	1.6	13	4.6	7.0	18	18	21	8.5	2.4	1.8	.71
2	.67	2.0	11	4.4	31	20	16	19	7.7	2.3	1.7	5.5
3	.61	4.0	14	4.2	116	21	18	18	6.4	3.3	8.1	24
4	6.9	2.2	156	4.4	22	18	20	47	5.9	15	3.9	3.8
5	18	1.9	62	5.0	11	49	34	25	5.5	14	2.8	8.1
6	2.9	1.6	78	5.4	8.0	47	64	52	5.2	6.6	1.6	4.2
7	1.0	1.5	40	5.4	4.5	36	45	29	4.4	4.1	1.4	1.4
8	.60	1.4	27	5.2	3.5	28	21	21	4.2	3.0	4.4	,84
9	.47	1.3	22	4.8	3.7	22	18	16	3.8	2.5	5.5	7.7
10	.39	81	24	4.6	63	19	15	15	3.4	2.6	1.9	8.7
11	.66	103	242	4.4	63	16	12	14	3.2	2.6	3.0	2.7
12	.45	24	188	4.2	39	13	23	20	3.2	2.6	2.3	1.5
13	22	9.9	64	3.9	95	18	27	17	36	2.0	1.3	.97
14	6.6	6.7	60	3.7	39	15	16	13	38	1.3	1.1	23
15	1.8	8.0	46	3.5	26	72	43	11	6.8	1.2	1.0	8.9
16	1.1	10	28	3.4	23	600	40	9.5	4.8	1.2	.97	3.0
17	.69	8.0	19	3.0	22	350	36	8.3	3.7	1.2	1.8	2.0
18	20	6.5	15	1.9	20	200	44	7.8	2.8	1.2	1.5	1.7
19	6.4	6.0	13	1.7	22	130	27	7.0	3.0	.94	.96	1.6
20	87	8.0	10	1.6	16	330	21	100	2.9	2.1	.89	1.3
21	32	6.0	11	1.5	13	200	134	30	2.6	2.0	.80	1.1
22	54	5.5	12	1.8	11	90	332	35	2.5	1.4	14	1.2
23	12	141	11	2.2	11	68	105	35	2.2	.96	4.8	45
24	5.9	41	10	3.0	28	55	64	20	15	.90	1.8	60
25	4.0	16	8.0	5.0	47	70	24	22	6.1	2.1	1.1	133
26	3.1	10	7.4	8.0	22	55	19	53	4.2	134	1.0	84
27	2.9	98	6.8	10	25	43	15	16	15	16	1.0	11
28	2.2	131	6.7	8.0	48	35	12	29	6.6	8.7	7.6	6.6
29	2.2	33	6.2	5.3	32	29	10	18	3.7	4.7	2.5	4.5
30	2.2	18	5.5	4.9	---	25	28	13	2.8	2.3	1.0	3.3
31	1.6	---	5.0	9.4	---	21	---	11	---	1.9	.80	---
TOTAL	300.92	788.1	1221.6	138.4	871.7	2713	1301	752.6	220.1	247.10	84.32	461.32
MEAN	9.71	26.3	39.4	4.46	30.1	87.5	43.4	24.3	7.34	7.97	2.72	15.4
MAX	87	141	242	10	116	600	332	100	38	134	14	133
MIN	.39	1.3	5.0	1.5	3.5	13	10	7.0	2.2	.90	.80	.71
CFSM	.41	1.10	1.65	.19	1.26	3.66	1.82	1.02	.31	.33	.11	.64
IN.	.47	1.23	1.90	.22	1.36	4.22	2.02	1.17	.34	.38	.13	.72

CAL YR 1983 TOTAL 7555.25 MEAN 20.7 MAX 288 MIN .39 CFSM .87 IN 11.76
WTR YR 1984 TOTAL 9100.16 MEAN 24.9 MAX 600 MIN .39 CFSM 1.04 IN 14.16

03353620 LICK CREEK AT INDIANAPOLIS, IN

LOCATION.--Lat 39°42'21", long 86°06'13", in NE¼NE¼ sec.32, T.15 N., R.4 E., Marion County, Hydrologic Unit 05120201, on left bank at upstream side of Sherman Drive bridge in Indianapolis, and at mile 6.2.

DRAINAGE AREA.--15.6 mi².

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 742.00 ft National Geodetic Vertical Datum of 1929 (Indiana Flood Control and Water Resources Commission bench mark).

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--14 years, 19.0 ft³/s, 16.54 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,500 ft³/s June 25, 1978, gage height, 9.61 ft; minimum daily, 0.05 ft³/s Sept. 19, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 500 ft³/s (revised) and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 2	1515	508	4.08	May 25	0115	529	4.16
Feb. 10	0615	620	4.50	July 26	1400	516	4.11
Mar. 16	0130	*830	*5.22	July 28	1330	582	4.36
Apr. 22	0845	735	4.90				

Minimum daily discharge, 0.08 ft³/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	1.0	8.8	3.6	8.0	8.8	10	12	7.6	.65	2.0	.88
2	.12	4.3	7.6	3.4	164	9.6	8.8	10	6.6	.65	2.0	.42
3	.08	6.0	14	3.6	86	10	24	18	6.0	20	1.7	15
4	4.1	2.6	112	3.5	19	45	28	29	5.1	79	63	2.6
5	27	1.5	35	3.8	6.0	46	42	18	4.1	130	30	8.4
6	4.1	1.4	36	8.8	4.8	35	24	45	3.6	26	9.6	2.6
7	2.6	1.1	24	6.9	4.1	25	16	25	3.6	12	8.4	1.0
8	.59	1.0	19	4.3	3.6	21	12	19	3.2	6.6	24	.80
9	.33	.80	15	3.1	6.6	16	12	14	2.6	3.2	15	3.2
10	.38	86	18	13	124	12	10	11	2.6	2.6	24	7.6
11	.42	70	141	3.0	31	10	8.8	10	2.0	3.2	35	1.7
12	1.1	16	103	2.1	50	8.2	19	12	2.1	3.2	7.6	.88
13	30	8.4	39	2.0	40	12	21	9.6	6.0	1.5	4.1	2.6
14	5.7	3.6	40	1.7	24	13	17	7.3	20	1.1	3.0	21
15	1.1	14	28	1.5	21	84	29	5.7	3.6	1.0	2.1	4.8
16	.59	14	18	1.6	18	325	38	5.1	2.6	.88	1.3	1.4
17	.42	10	15	1.6	14	70	46	5.1	2.5	4.1	1.5	1.0
18	.53	7.6	13	1.5	14	45	49	4.1	2.1	4.8	1.7	.80
19	.59	4.1	11	1.0	11	33	35	4.1	2.1	1.4	1.1	.88
20	54	8.8	9.2	.96	8.4	161	33	73	1.4	1.5	.88	.65
21	19	5.7	20	1.2	6.6	68	138	53	1.4	2.5	.80	.59
22	16	6.0	40	6.0	5.7	67	372	88	1.1	1.1	16	.53
23	12	93	14	11	5.7	45	95	172	1.4	1.1	4.3	30
24	7.6	32	8.6	39	20	31	54	39	8.8	1.0	1.4	8.4
25	2.6	14	7.0	32	20	39	35	28	2.5	2.5	.88	56
26	1.7	8.4	6.1	62	14	28	25	35	5.7	70	.59	32
27	1.4	77	5.3	45	12	26	21	18	11	19	.53	11
28	1.4	70	4.7	15	11	24	19	28	2.6	50	5.1	8.8
29	1.4	23	4.1	6.0	9.6	20	18	19	1.4	14	2.0	5.6
30	.88	14	3.8	4.3	---	17	25	14	1.0	4.3	.88	4.3
31	.86	---	3.6	3.5	---	12	---	10	---	4.1	.59	---
TOTAL	198.77	605.30	823.8	295.96	762.1	1366.6	1282.6	841.0	126.3	472.98	271.25	235.43
MEAN	6.41	20.2	26.6	9.55	26.3	44.1	42.8	27.1	4.21	15.3	8.75	7.85
MAX	54	93	141	62	164	325	372	172	20	130	63	56
MIN	.08	.80	3.6	.96	3.6	8.2	8.8	4.1	1.0	.65	.53	.42
CFSM	.41	1.30	1.71	.61	1.69	2.83	2.74	1.74	.27	.98	.56	.50
IN.	.47	1.44	1.96	.71	1.82	3.26	3.06	2.01	.30	1.13	.65	.56

CAL YR 1983 TOTAL 4805.97 MEAN 13.2 MAX 166 MIN .05 CFSM .85 IN 11.46
WTR YR 1984 TOTAL 7282.09 MEAN 19.9 MAX 372 MIN .08 CFSM 1.28 IN 17.36

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03353700 WEST FORK WHITE LICK CREEK AT DANVILLE, IN

LOCATION.--Lat 39°45'36", long 86°30'47", in NW¼NE¼ sec.10, T.15 N., R.1 W., Hendricks County, Hydrologic Unit 05120201, on downstream side of bridge on U.S. Highway 36, 0.1 mile east of city limits of Danville, 0.5 mile upstream from small left-bank tributary, and 7 miles west of Avon.

DRAINAGE AREA.--28.8 mi².

PERIOD OF RECORD.--May 1958 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 828.83 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 23, 1968, nonrecording gage and crest-stage gage on upstream side of bridge at same datum. Oct. 23, 1968, to Aug. 6, 1970, water-stage recorder on upstream side of bridge at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Low flow affected by releases from Danville Filtration Plant.

AVERAGE DISCHARGE.--26 years, 29.2 ft³/s, 13.77 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,330 ft³/s July 14, 1962, gage height, 11.32 ft; maximum gage height, 12.13 ft July 13, 1979; no flow at times during most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 16.0 ft, from floodmarks, discharge, 6,660 ft³/s, from contracted-opening measurement .

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 16	0215	*1120	*6.79

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	1.2	15	6.1	6.7	18	24	22	16	2.1	1.2	.00
2	.00	1.7	12	6.2	31	17	20	19	13	1.8	.96	.12
3	.00	1.5	9.9	6.2	195	20	26	23	11	2.4	.84	.48
4	.44	1.4	83	6.3	82	24	45	35	11	6.0	.67	.04
5	1.4	1.4	82	6.4	41	25	123	33	10	4.9	.82	.92
6	.12	1.3	137	6.6	22	36	65	66	8.9	3.8	.36	.05
7	.07	1.3	74	6.5	15	31	39	52	8.2	2.0	.25	.04
8	.09	1.3	40	6.4	12	27	29	35	7.7	1.4	.47	.02
9	.06	1.2	29	7.0	11	24	26	26	7.0	1.0	.50	.49
10	.07	3.5	31	7.8	28	21	22	20	6.3	.90	.59	.10
11	.37	17	314	6.6	180	18	18	18	5.1	2.3	1.3	.14
12	.60	12	285	5.5	152	16	19	16	4.6	1.6	.36	.05
13	2.8	6.4	134	5.1	208	14	23	15	6.8	.78	.10	.08
14	1.2	4.6	133	5.0	142	12	19	12	7.2	.50	.07	1.2
15	.48	4.4	120	4.9	96	77	32	10	4.6	.44	.04	.14
16	.33	5.7	51	4.8	72	675	55	8.9	4.1	.42	.04	.05
17	.09	7.2	33	4.6	59	260	48	8.3	3.8	.39	.06	.03
18	.15	6.1	26	4.4	48	162	50	8.0	3.3	.79	.06	.03
19	.11	5.1	22	4.0	54	117	39	7.8	2.7	.31	.04	.03
20	2.4	6.1	18	3.5	44	297	30	42	2.5	.61	.29	.02
21	2.9	8.6	15	3.2	37	169	117	73	2.4	.65	.02	.02
22	5.8	6.4	25	3.4	31	141	445	37	3.0	.43	1.0	.01
23	6.3	40	22	3.8	26	127	189	54	4.7	.30	.06	4.6
24	4.0	46	17	4.5	23	103	116	31	5.7	.23	.03	3.9
25	3.0	14	14	5.1	22	156	77	26	4.9	.20	.02	14
26	2.4	7.1	12	9.2	21	105	53	76	2.7	65	.02	12
27	1.9	44	10	18	21	82	38	38	18	47	.02	1.3
28	1.5	160	8.8	11	20	69	28	33	12	14	.15	.59
29	1.4	59	7.9	8.2	19	47	24	26	4.2	6.2	.03	.57
30	1.3	27	7.1	6.4	---	34	31	21	2.7	2.7	.02	.41
31	1.2	---	6.5	4.8	---	27	---	18	---	1.5	.00	---
TOTAL	42.48	502.5	1794.2	191.5	1718.7	2951	1870	910.0	204.1	172.65	10.39	41.43
MEAN	1.37	16.8	57.9	6.18	59.3	95.2	62.3	29.4	6.80	5.57	.34	1.38
MAX	6.3	160	314	18	208	675	445	76	18	65	1.3	14
MIN	.00	1.2	6.5	3.2	6.7	12	18	7.8	2.4	.20	.00	.00
CFSM	.05	.58	2.01	.22	2.06	3.31	2.16	1.02	.24	.19	.01	.05
IN.	.05	.65	2.32	.25	2.22	3.81	2.42	1.18	.26	.22	.01	.05

CAL YR 1983 TOTAL 7228.47 MEAN 19.8 MAX 334 MIN .00 CFSM .69 IN 9.34
WTR YR 1984 TOTAL 10408.95 MEAN 28.4 MAX 675 MIN .00 CFSM .99 IN 13.44

03353800 WHITE LICK CREEK AT MOORESVILLE, IN

LOCATION.--Lat 39°36'28", long 86°22'56", in NE¼SE¼ sec.35, T.14 N., R.1 E., Morgan County, Hydrologic Unit 05120201, on right bank at downstream side of bridge on State Highway 42 at Mooresville, 0.9 mile downstream from McCracken Creek, 2.0 miles upstream from East Fork White Lick Creek, and at mile 11.4.

DRAINAGE AREA.--212 mi².

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 644.64 ft National Geodetic Vertical Datum of 1929. Dec. 10, 1963 to Sept. 30, 1964, nonrecording gage at bridge 1,950 ft upstream at datum 1.39 ft higher.

REMARKS.--Records good.

AVERAGE DISCHARGE.--27 years, 219 ft³/s, 14.00 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,000 ft³/s July 13, 1979, gage height, 23.31 ft; minimum daily, 2.0 ft³/s Dec. 24, 25, 1960, Sept. 2, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 22.5 ft, from levels to high-water mark by State of Indiana, Department of Natural Resources.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 16	0800	*4780	*18.69	Apr. 22	1100	3680	16.97

Minimum daily discharge 3.9 ft³/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	11	208	66	53	141	262	244	136	36	23	11
2	4.2	12	171	70	121	152	239	215	122	31	33	11
3	3.9	15	161	68	863	142	248	213	108	29	42	12
4	5.0	15	452	67	381	144	365	299	94	70	26	16
5	15	14	521	71	198	203	872	318	86	128	22	14
6	12	13	628	76	122	309	521	384	79	88	20	16
7	8.0	12	540	77	84	296	367	381	73	54	19	14
8	6.9	12	356	68	70	258	301	301	68	39	17	10
9	6.2	11	282	65	59	190	279	249	63	32	20	8.3
10	5.8	23	265	92	256	184	255	214	57	28	31	12
11	5.7	169	1110	65	696	174	229	190	52	26	22	16
12	6.6	147	1620	57	471	145	216	178	48	26	19	15
13	13	85	746	55	783	150	250	176	47	25	17	11
14	13	60	644	51	589	143	222	161	99	22	15	18
15	11	51	616	47	391	251	269	138	103	21	15	22
16	9.3	53	388	44	326	3640	379	126	68	20	14	18
17	8.3	57	286	42	289	1500	431	118	54	19	14	15
18	8.4	58	218	41	275	915	399	110	48	18	15	13
19	10	51	155	36	283	701	351	104	45	18	14	12
20	42	48	142	31	243	1510	298	137	40	18	12	11
21	92	50	142	28	206	1040	581	567	38	21	12	11
22	79	46	179	30	181	868	2570	315	36	19	14	11
23	97	142	132	34	165	759	1170	324	35	17	21	33
24	63	363	105	38	161	616	743	244	37	16	16	66
25	41	203	99	47	247	736	541	195	41	16	14	87
26	27	134	94	64	213	669	427	311	42	128	12	218
27	21	163	92	130	178	545	355	257	48	228	12	63
28	17	917	88	103	150	499	302	231	78	86	13	38
29	15	485	82	74	153	423	260	214	60	52	13	29
30	13	293	73	55	---	331	274	178	42	34	12	23
31	12	---	66	46	---	289	---	154	---	27	11	---
TOTAL	675.7	3713	10661	1838	8207	17923	13976	7246	1947	1392	560	854.3
MEAN	21.8	124	344	59.3	283	578	466	234	64.9	44.9	18.1	28.5
MAX	97	917	1620	130	863	3640	2570	567	136	228	42	218
MIN	3.9	11	66	28	53	141	216	104	35	16	11	8.3
CFSM	.10	.59	1.62	.28	1.34	2.73	2.20	1.10	.31	.21	.09	.13
IN.	.12	.65	1.87	.32	1.44	3.14	2.45	1.27	.34	.24	.10	.15

CAL YR 1983 TOTAL 54866.2 MEAN 150 MAX 1670 MIN 3.9 CFSM .71 IN 9.63
WTR YR 1984 TOTAL 68993.0 MEAN 189 MAX 3640 MIN 3.9 CFSM .89 IN 12.11

03354000 WHITE RIVER NEAR CENTERTON, IN

LOCATION.--Lat 39°29'51", long 86°24'02", in NE¼NE¼ sec.10, T.12 N., R.1 E., Morgan County, Hydrologic Unit 05120201, on right bank at upstream side of bridge on Blue Bluff Road, 0.8 mile downstream from White Lick Creek, 1 mile south of Centerton, and at mile 199.3.

DRAINAGE AREA.--2,444 mi².

PERIOD OF RECORD.--July 1925 to September 1930 (gage heights only), October 1930 to March 1932, October 1946 to current year. Monthly discharge only for October and November 1946, published in WSP 1305. Published as West Fork White River at Martinsville prior to March 1932, and as West Fork White River near Centerton October 1946 to September 1948.

REVISED RECORDS.--WSP 1335: 1948-49. WSP 1909: 1931(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 595.44 ft National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark), levels by Indianapolis Power and Light Co. See WSP 1725 for history of changes prior to July 1953. July 1953 to Aug. 7, 1975, water-stage recorder at site 0.4 mile downstream at same datum.

REMARKS.--Records good. Flow regulated by upstream reservoirs.

AVERAGE DISCHARGE.--39 years (1930-31, 1946 to current year), 2,407 ft³/s, 13.37 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 50,500 ft³/s Apr. 22, 1964, gage height, 17.57 ft, at site 0.4 mile downstream; minimum daily, 131 ft³/s Nov. 15, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 22.8 ft at Martinsville site (from information by Indiana State Highway Commission) and 21.9 ft at site 0.4 mile downstream (from information by Corps of Engineers), discharge, 90,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 9,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 14	----	12000	10.4	Mar. 16	2200	*18400	*13.33
Feb. 13	2100	9530	8.76	Apr. 22	1800	17300	12.93

Minimum daily discharge, 331 ft³/s Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	359	410	3390	1120	979	2210	4300	3490	2300	784	571	418
2	331	418	2670	1110	1160	2150	3700	3130	2030	717	565	359
3	338	499	2350	1080	3080	2120	3700	3200	1850	692	593	373
4	359	533	3350	1080	4170	2110	4500	3200	1700	1370	618	613
5	774	507	4250	1090	4730	2390	6000	2800	1570	1940	971	498
6	765	434	4870	1110	3360	3140	6800	3100	1440	2880	1320	637
7	474	434	6090	1150	2450	3110	7200	2700	1360	2280	1280	498
8	395	434	5770	1060	1800	2970	5600	2400	1310	1980	973	426
9	395	427	4600	990	1540	2560	4500	2200	1230	1540	964	381
10	395	432	3620	1080	1790	2310	3800	2000	1160	1250	884	482
11	388	2550	5220	990	4740	2180	3400	2000	1110	1040	1230	507
12	359	2290	10700	893	7250	1910	3000	2100	1070	993	1170	441
13	490	2260	11300	874	8880	1910	3100	2400	1040	923	861	410
14	721	1910	11800	865	8910	1880	2910	2600	1710	825	757	465
15	465	1480	9810	893	7410	2210	3110	2200	1390	735	668	765
16	441	1380	6830	931	5380	13800	4220	1990	1150	693	604	558
17	449	1340	5130	903	4480	16300	5640	1880	1050	665	577	465
18	381	1490	4040	903	4040	15800	6230	1750	963	652	561	410
19	395	1560	3300	856	3810	15200	6130	1650	1030	605	566	366
20	695	1360	2740	801	3600	14000	5280	1650	902	590	644	359
21	1900	1250	2590	680	3250	15200	5840	4160	826	600	582	338
22	1210	1090	2870	690	2980	15400	14100	3140	790	585	534	338
23	1330	1750	2630	756	2650	14200	13200	4890	785	574	922	465
24	1110	3250	2100	808	2460	10200	11300	3390	1120	584	597	980
25	980	2500	1700	1120	2810	9050	10900	3340	1320	566	482	1110
26	874	2670	1600	1120	2890	9210	7740	3480	1060	749	434	2240
27	730	2420	1500	1480	2760	9800	5770	2980	1080	2280	403	1480
28	605	5020	1400	1350	2800	9020	4880	2800	1210	1050	441	1100
29	515	4200	1300	1300	2520	7740	4120	2780	991	915	524	864
30	474	4190	1200	1230	---	6200	3840	2590	876	720	565	703
31	434	---	1180	1070	---	5000	---	2510	---	644	490	---
TOTAL	19531	50488	131900	31383	108679	221280	174810	84500	37423	32421	22351	19049
MEAN	630	1683	4255	1012	3748	7138	5827	2726	1247	1046	721	635
MAX	1900	5020	11800	1480	8910	16300	14100	4890	2300	2880	1320	2240
MIN	331	410	1180	680	979	1880	2910	1650	785	566	403	338
CFSM	.26	.69	1.74	.41	1.53	2.92	2.38	1.12	.51	.43	.30	.26
IN.	.30	.77	2.01	.48	1.65	3.37	2.66	1.29	.57	.49	.34	.29

CAL YR 1983 TOTAL 722392 MEAN 1979 MAX 14500 MIN 329 CFSM .81 IN 11.00
WTR YR 1984 TOTAL 933815 MEAN 2551 MAX 16300 MIN 331 CFSM 1.04 IN 14.21

03354000 WHITE RIVER NEAR CENTERTON, IN--Continued

INSTRUMENTATION.--Temperature recorder.

EXTREMES FOR PERIOD OF RECORD.--Water temperature: Maximum, 33°C July 3, 1970; Minimum, -0.5°C Dec. 23-27, 1983.

EXTREMES FOR CURRENT YEAR.--Water Temperature: Maximum, 30.5°C Aug. 8, 10; Minimum, -0.5°C Dec. 23-27.

REMARKS.--Temperature affected by upstream powerplants and reservoirs.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	16.0	5.0	2.0	4.0	3.0	8.0	15.0	19.0	25.0	25.0	25.5
2	21.0	16.0	5.0	3.0	5.0	4.0	8.5	16.0	20.5	25.0	25.5	27.0
3	21.0	16.5	5.5	3.0	2.0	4.0	9.0	15.5	22.0	25.5	25.5	24.5
4	21.0	14.0	5.5	3.5	1.5	3.5	8.5	14.5	22.0	25.0	25.5	23.5
5	21.0	12.5	5.5	3.5	1.0	4.0	8.5	14.0	23.5	25.0	25.5	22.0
6	21.0	12.0	6.5	4.0	1.0	4.0	8.5	14.5	24.0	24.5	26.0	22.0
7	20.0	13.0	4.5	3.5	1.0	3.5	8.5	15.0	24.0	24.5	27.5	22.5
8	19.0	13.0	5.0	3.0	1.5	3.0	8.5	15.0	24.0	24.0	28.5	22.5
9	19.0	14.0	5.0	3.0	3.5	2.5	8.0	13.5	25.0	25.0	28.5	22.0
10	18.5	14.5	6.0	3.0	4.0	3.0	10.0	14.0	26.0	27.0	28.5	22.0
11	19.0	12.0	6.0	2.5	2.0	3.0	11.5	16.0	26.5	26.5	28.0	23.0
12	18.5	10.0	11.5	2.5	3.0	2.5	12.0	17.5	26.5	26.0	27.5	23.5
13	17.0	9.5	10.5	3.0	5.0	3.5	12.5	17.5	27.5	27.0	27.5	25.0
14	16.0	9.5	10.5	3.5	5.0	5.0	13.0	17.5	27.0	28.0	26.5	24.5
15	16.0	10.5	9.0	3.0	5.0	6.0	12.0	17.5	27.0	27.0	27.0	22.5
16	16.5	10.0	7.5	2.5	5.5	4.5	11.0	17.5	27.0	26.5	27.0	20.0
17	17.0	10.0	6.0	2.5	6.0	3.0	10.0	18.0	27.0	26.0	27.5	19.5
18	16.0	10.5	3.0	2.5	6.5	3.0	9.0	19.5	27.0	25.0	27.0	19.5
19	15.5	12.0	1.0	1.0	7.0	3.0	8.5	21.0	27.5	24.5	26.5	20.5
20	14.5	12.5	1.0	.5	6.5	5.0	9.0	20.5	27.5	24.0	26.0	21.5
21	14.5	11.5	1.5	.5	6.0	4.0	9.5	19.0	27.0	24.5	25.5	22.5
22	15.0	12.0	1.5	1.0	6.5	3.5	8.5	20.5	26.5	26.5	25.5	23.0
23	16.0	12.0	.0	2.5	7.5	4.0	9.5	20.5	27.0	27.0	25.5	22.0
24	15.5	11.0	-0.5	4.5	7.0	5.0	9.0	20.5	27.0	27.5	25.0	22.0
25	15.5	8.5	-0.5	4.5	6.0	5.0	10.0	21.0	27.5	27.0	24.0	22.0
26	14.5	8.5	-0.5	4.0	6.0	5.0	12.5	21.5	25.5	25.0	24.5	19.5
27	14.0	8.5	-0.5	3.0	4.0	6.0	14.0	20.0	25.5	23.5	24.5	18.0
28	15.0	8.5	1.0	2.5	2.5	6.0	15.5	19.0	25.5	24.5	25.5	17.0
29	15.0	7.5	.5	3.0	2.5	6.0	15.5	16.5	25.5	24.5	26.5	17.5
30	14.5	6.5	.0	3.0	---	6.0	15.5	16.5	24.0	24.0	27.5	17.0
31	14.5	---	.5	2.5	---	6.5	---	17.5	---	24.5	26.0	---
TOTAL	532.5	342.5	122.5	86.0	124.0	130.0	314.0	542.0	761.5	789.5	816.5	653.5
MEAN	17.0	11.5	4.0	3.0	4.5	4.0	10.5	17.5	25.5	25.5	26.5	22.0
MAX	21.0	16.5	11.5	4.5	7.5	6.5	15.5	21.5	27.5	28.0	28.5	27.0
MIN	14.0	6.5	-0.5	.5	1.0	2.5	8.0	13.5	19.0	23.5	24.0	17.0

WTR YR 1984 TOTAL 5214.5 MEAN 14.5 MAX 28.5 MIN -0.5

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03354000 WHITE RIVER NEAR CENTERTON, IN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	17.0	6.5	2.5	5.0	3.5	9.0	16.0	20.0	26.0	26.5	27.0
2	22.5	16.5	5.0	3.0	6.0	5.5	9.5	17.0	22.5	27.0	26.5	28.0
3	22.5	16.5	5.5	3.0	5.0	5.5	9.5	16.0	23.5	28.0	26.5	25.5
4	21.5	15.0	5.5	4.0	1.5	4.0	9.0	15.0	23.5	26.0	26.0	25.0
5	22.0	13.5	6.0	4.0	1.5	5.0	9.0	14.5	25.0	26.5	27.0	23.5
6	21.5	13.0	6.5	4.5	1.0	5.0	9.0	15.0	25.5	25.5	28.0	23.5
7	21.0	14.0	5.5	3.5	1.5	4.5	9.0	15.5	25.0	25.5	29.5	24.5
8	20.5	14.0	5.0	3.5	2.0	3.5	9.0	16.0	25.0	25.0	30.5	24.5
9	20.0	14.5	5.5	3.5	4.5	3.5	8.5	14.0	27.0	26.5	30.0	22.5
10	19.5	14.5	6.0	3.5	4.5	3.5	12.0	15.5	27.5	29.0	30.5	23.0
11	19.5	13.5	6.5	3.0	2.5	4.5	13.0	17.0	27.5	27.0	29.5	24.0
12	19.0	10.0	11.0	3.0	4.5	3.5	12.0	19.5	28.0	28.0	29.0	25.5
13	17.5	10.5	10.5	3.5	5.0	4.5	14.5	18.0	29.5	29.0	29.0	27.0
14	16.5	10.0	10.5	4.0	5.5	6.0	13.5	19.0	28.5	29.5	29.0	25.0
15	17.5	10.5	10.0	4.0	6.0	7.0	12.5	19.0	28.5	28.0	29.0	24.5
16	18.0	10.5	8.0	3.0	6.0	6.5	11.5	19.0	28.5	28.0	28.5	21.5
17	17.5	10.5	6.5	3.0	6.0	3.0	10.5	20.0	29.0	26.5	28.5	20.0
18	17.0	11.0	3.5	3.0	7.0	3.0	9.5	21.0	28.5	26.0	29.0	21.5
19	15.5	13.0	1.5	2.5	7.0	3.5	9.0	22.5	29.0	27.0	28.0	22.5
20	15.5	13.0	1.0	1.0	7.0	5.5	10.0	21.0	29.5	24.5	28.0	23.5
21	14.5	12.0	2.0	.5	7.0	5.0	10.0	19.5	28.0	27.0	27.5	24.5
22	15.5	13.5	2.0	1.5	8.0	3.5	9.5	22.0	27.5	29.0	26.0	24.5
23	16.0	14.0	.0	3.5	8.5	5.0	9.5	21.5	28.5	29.0	27.0	23.0
24	16.0	13.0	-0.5	5.0	8.0	5.0	9.5	22.0	29.0	29.5	26.5	22.0
25	15.5	9.0	-0.5	4.5	7.0	5.5	11.5	21.5	28.0	28.0	28.5	23.5
26	15.5	9.0	-0.5	4.5	6.5	5.5	13.5	22.5	27.0	26.0	30.0	21.5
27	15.0	8.5	.5	3.5	5.5	6.5	15.0	20.5	26.5	25.0	28.0	19.0
28	16.0	8.5	2.0	3.0	2.5	6.5	17.0	19.5	27.0	26.0	28.0	18.5
29	16.0	8.0	1.0	3.5	3.5	6.5	16.0	17.5	25.5	26.0	27.5	18.0
30	15.0	7.0	.5	3.0	---	6.5	16.5	17.5	25.5	26.0	26.0	17.5
31	15.0	---	1.5	3.0	---	7.5	---	19.0	---	26.0	27.0	---
TOTAL	557.5	363.5	134.0	100.5	145.5	153.5	337.5	573.5	803.5	836.0	870.5	694.0
MEAN	18.0	12.0	4.5	3.0	5.0	5.0	11.5	18.5	27.0	27.0	28.0	23.0
MAX	23.0	17.0	11.0	5.0	8.5	7.5	17.0	22.5	29.5	29.5	30.5	28.0
MIN	14.5	7.0	-0.5	.5	1.0	3.0	8.5	14.0	20.0	24.5	26.0	17.5

WTR YR 1984 TOTAL 5569.5 MEAN 15.0 MAX 30.5 MIN -0.5

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TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	15.0	5.5	1.5	3.0	2.0	7.0	14.0	17.5	22.5	23.5	23.5
2	19.5	15.5	5.0	2.5	4.0	3.0	7.5	14.5	19.0	22.5	24.5	25.5
3	20.0	15.5	5.0	2.5	1.5	3.0	8.5	15.0	20.5	23.5	25.0	24.0
4	20.5	13.0	5.0	2.5	1.0	3.0	8.5	13.5	21.0	24.5	24.5	22.0
5	20.5	11.0	5.0	3.0	1.0	3.5	8.5	13.0	22.0	24.0	24.5	21.0
6	20.0	11.0	5.5	3.5	.5	3.0	7.5	14.0	23.0	24.0	24.0	20.0
7	19.0	12.5	4.5	3.0	.5	2.5	7.0	15.0	23.0	23.5	26.5	21.5
8	18.0	12.0	5.0	2.0	1.0	3.0	8.5	14.0	23.0	22.5	27.5	21.0
9	18.5	13.0	5.0	2.5	2.0	1.5	8.0	13.0	23.0	23.5	27.0	21.5
10	17.5	13.5	5.5	2.5	3.0	2.0	8.5	12.5	24.0	25.5	27.5	21.0
11	17.5	10.0	6.0	2.5	1.5	2.5	10.0	14.5	24.5	25.5	26.5	22.5
12	18.0	9.0	10.5	2.0	2.0	2.0	11.5	16.0	25.5	24.5	26.5	21.5
13	16.5	9.0	10.5	2.5	4.5	2.0	11.0	16.5	25.5	25.0	26.5	23.0
14	15.5	9.0	10.0	3.0	4.0	4.0	13.0	16.0	25.5	27.0	25.0	24.5
15	14.5	10.0	9.0	2.5	4.5	4.5	11.5	16.0	25.5	26.5	25.5	21.0
16	16.0	10.0	7.5	2.0	5.0	3.0	10.5	16.0	25.5	25.0	25.5	19.5
17	17.0	9.0	5.5	2.5	6.0	3.0	9.5	16.5	25.5	24.0	26.0	18.0
18	15.5	9.5	2.5	2.0	6.0	3.0	8.5	17.5	26.0	24.0	25.5	17.5
19	15.0	10.5	.5	.5	6.5	2.5	8.5	19.5	25.5	22.5	25.0	18.5
20	13.5	11.0	.5	.5	6.0	3.5	8.5	19.5	26.5	24.0	24.5	19.5
21	13.5	10.5	1.0	.0	5.5	3.5	9.0	18.5	26.0	22.0	23.5	20.5
22	14.0	11.0	.5	.5	5.5	3.0	8.0	19.0	25.5	24.0	25.0	21.5
23	15.5	13.0	-0.5	1.5	6.0	3.0	9.0	19.5	26.0	25.0	24.0	22.0
24	15.5	9.0	-0.5	3.5	6.0	4.5	8.5	19.0	25.0	25.5	24.5	21.5
25	15.0	8.0	-0.5	4.0	5.5	5.0	9.0	20.0	26.0	26.0	22.0	21.5
26	14.0	8.0	-0.5	3.5	5.0	4.5	11.5	21.0	24.0	24.0	22.5	19.0
27	13.0	8.5	-0.5	2.5	2.5	5.5	13.5	19.0	25.0	22.5	23.0	17.0
28	13.5	8.0	.5	2.5	2.0	6.0	14.5	17.5	24.0	23.5	24.0	16.5
29	14.5	7.0	.0	2.5	1.5	5.5	15.5	16.0	24.5	23.0	24.5	17.0
30	13.5	6.0	.0	2.0	---	5.5	14.5	15.0	23.0	22.0	27.0	16.5
31	13.5	---	.0	1.5	---	5.5	---	16.0	---	23.0	25.0	---
TOTAL	507.0	318.0	113.0	69.5	103.0	108.0	295.0	507.0	720.5	744.5	776.0	619.5
MEAN	16.5	10.5	3.5	2.0	3.5	3.5	10.0	16.5	24.0	24.0	25.0	20.5
MAX	20.5	15.5	10.5	4.0	6.5	6.0	15.5	21.0	26.5	27.0	27.5	25.5
MIN	13.0	6.0	-0.5	.0	.5	1.5	7.0	12.5	17.5	22.0	22.0	16.5

WTR YR 1984 TOTAL 4881.0 MEAN 13.5 MAX 27.5 MIN -0.5

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05334500 BEANBLOSSOM CREEK AT BEANBLOSSOM, IN

LOCATION.--Lat 39°15'45", long 86°14'55", in SW¼NW¼ sec.31, T.10 N., R.3 E., Brown County, Hydrologic Unit 05120202, on right bank 15 ft downstream from bridge on State Highway 135, 0.3 mile south of Beanblossom, 2.7 miles upstream from North Fork Beanblossom Creek, and at mile 42.1.

DRAINAGE AREA.--14.6 mi².

PERIOD OF RECORD.--October 1951 to current year. Prior to October 1965, published as Bean Blossom Creek at Bean Blossom.

REVISED RECORDS.--WSP 1555: 1952, 1953(M), 1956-57. WSP 1705: 1952(P). WDR IN-79-1: 1978.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 673.65 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those below 1 cfs, which are fair.

AVERAGE DISCHARGE.--33 years, 15.9 ft³/s, 14.79 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,140 ft³/s June 23, 1960, gage height, 11.78 ft, from curve extended above 2,000 ft³/s on basis of contracted-opening measurement at gage height 11.78 ft; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 4	2300	1380	9.19	Apr. 22	0815	*1910	*10.30

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	1.2	12	2.4	2.3	14	18	15	4.9	.07	.23	.00
2	.00	1.3	11	2.5	3.0	18	16	12	3.8	.07	.19	.00
3	.00	1.9	11	2.6	15	21	17	17	2.8	.07	.11	.00
4	.00	1.9	33	2.8	14	24	249	23	2.3	.66	4.0	.00
5	.23	1.8	24	3.0	9.8	61	328	22	1.8	.91	1.9	.00
6	.00	1.7	25	3.2	6.5	56	60	25	1.5	.52	.45	.00
7	.00	1.8	20	3.0	4.9	36	32	24	1.4	.23	.23	.00
8	.00	1.7	16	2.9	3.8	30	25	20	1.2	.11	.19	.00
9	.00	1.8	14	2.9	3.8	25	23	16	.91	.07	.33	.00
10	.00	4.9	12	2.8	9.8	20	17	14	.74	.06	.28	.00
11	.00	24	87	2.5	18	15	17	11	.66	.06	.19	.00
12	.00	8.1	69	2.3	19	13	18	13	.58	.07	.11	.00
13	.45	4.3	30	2.2	90	14	27	14	.58	.06	.07	.00
14	.45	2.8	32	2.0	43	27	22	15	.66	.06	.07	.00
15	.38	5.5	28	2.0	30	93	21	11	.52	.05	.06	.00
16	.33	9.8	21	1.9	25	231	22	8.5	.45	.05	.06	.00
17	.28	7.3	16	1.9	23	55	28	7.3	.58	.05	.05	.00
18	.33	5.2	12	1.8	22	32	26	6.2	.38	.04	.05	.00
19	.33	4.0	9.5	1.8	30	27	21	5.2	.33	.02	.05	.00
20	15	4.6	8.0	1.7	23	144	17	4.6	.23	.01	.05	.00
21	14	4.9	7.8	1.6	17	61	134	5.5	.28	.02	.02	.00
22	8.9	3.8	19	1.6	13	41	577	6.2	.23	.03	.00	.00
23	5.5	109	12	1.8	11	28	91	85	.23	.05	.00	.05
24	2.3	37	9.0	3.0	17	24	42	20	.19	.03	.00	.23
25	1.5	18	6.0	8.9	29	24	29	14	.15	.02	.00	.45
26	1.2	12	4.3	5.8	33	23	25	12	.07	.52	.00	.51
27	.91	53	3.8	4.5	25	23	24	7.7	.28	.58	.00	.15
28	.82	66	3.5	3.6	17	32	32	11	.28	.28	.00	.07
29	.74	24	3.0	3.0	15	40	24	11	.19	.38	.00	.07
30	1.0	16	2.5	2.5	---	27	19	8.5	.11	.19	.00	.06
31	1.1	---	2.4	2.3	---	22	---	7.3	---	.07	.00	---
TOTAL	55.75	439.3	563.8	86.8	572.9	1301	2001	472.0	28.33	5.41	8.69	1.59
MEAN	1.80	14.6	18.2	2.80	19.8	42.0	66.7	15.2	.94	.17	.28	.053
MAX	15	109	87	8.9	90	231	577	85	4.9	.91	4.0	.51
MIN	.00	1.2	2.4	1.6	2.3	13	16	4.6	.07	.01	.00	.00
CFSM	.12	1.00	1.25	.19	1.36	2.88	4.57	1.04	.06	.01	.02	.004
IN.	.14	1.12	1.44	.22	1.46	3.31	5.10	1.20	.07	.01	.02	.00

CAL YR 1983 TOTAL 5916.04 MEAN 16.2 MAX 381 MIN .00 CFSM 1.11 IN 15.07
WTR YR 1984 TOTAL 5536.57 MEAN 15.1 MAX 577 MIN .00 CFSM 1.03 IN 14.11

03357350 PLUM CREEK NEAR BAINBRIDGE, IN

LOCATION.--Lat 39°45'42", long 86°43'46", in SW¼SE¼ sec.3, T.15 N., R.3 W., Putnam County, Hydrologic Unit 05120203, on right upstream wingwall of bridge on U.S. Highway 36, 0.5 mile west of Groveland, and 4.5 miles east of Bainbridge.

DRAINAGE AREA.--3.00 mi^2.

PERIOD OF RECORD.--July 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 828.44 ft National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark).

REMARKS.--Records fair.

AVERAGE DISCHARGE.--15 years, 3.67 ft^3/s, 16.61 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 744 ft^3/s June 30, 1977, gage height, 5.75 ft; no flow at times during 1970, 1975-77, 1983-84.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 150 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 10	0915	174	3.11	Apr. 22	0515	224	3.24
Mar. 16	0200	*195	a*3.32				

a-ice jam

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.10	2.5	.62	.27	1.1	2.7	1.8	.94	.03	.02	.00
2	.00	.14	2.4	.67	1.1	1.1	2.4	1.6	.78	.03	.01	.00
3	.00	.16	2.3	.70	14	1.0	3.4	2.6	.62	.03	.01	.00
4	.00	.12	18	.75	3.1	1.2	7.2	2.7	.45	.42	.00	.00
5	.04	.10	8.9	.79	1.5	3.3	15	2.2	.38	.40	.01	.00
6	.00	.09	26	.81	.92	3.1	6.1	6.7	.33	.34	.00	.00
7	.00	.06	7.6	.78	.65	2.7	4.2	4.2	.29	.08	.00	.00
8	.00	.06	5.3	.76	.54	2.4	3.6	3.2	.26	.03	.00	.00
9	.00	.06	4.6	.80	.57	2.2	3.3	2.5	.23	.01	.00	.00
10	.00	.24	7.6	1.2	8.0	2.0	2.6	2.1	.17	.01	.00	.00
11	.00	3.6	30	.66	7.2	1.7	2.1	1.9	.14	.02	.00	.00
12	.00	1.3	25	.47	4.4	1.5	2.5	1.7	.13	.02	.00	.00
13	.01	.84	19	.44	13	1.7	2.7	1.9	.31	.00	.00	.00
14	.00	.64	17	.41	4.5	1.5	2.1	1.5	.47	.00	.00	.00
15	.00	.94	14	.38	3.0	4.3	3.0	1.3	.16	.00	.00	.00
16	.00	1.9	7.0	.37	2.8	74	4.4	1.2	.13	.00	.00	.00
17	.00	1.5	4.0	.34	3.6	17	5.0	1.1	.12	.00	.00	.00
18	.01	1.1	3.0	.29	3.3	11	5.1	1.0	.10	.00	.00	.00
19	.01	.90	2.4	.24	3.3	9.0	3.9	.99	.06	.00	.00	.00
20	1.6	1.6	2.0	.19	2.4	40	3.3	1.9	.05	.00	.00	.00
21	1.2	1.3	1.7	.23	2.0	13	28	1.7	.04	.00	.00	.00
22	2.3	1.0	3.2	.25	1.8	11	75	1.5	.05	.00	.00	.00
23	.94	11	1.9	.29	1.7	11	14	2.2	.04	.00	.00	.00
24	.52	6.9	1.2	.32	1.6	8.9	8.8	1.2	.04	.00	.00	.00
25	.29	3.6	1.0	.38	1.4	20	5.8	1.4	.04	.00	.00	.14
26	.23	2.4	.88	.90	1.3	8.8	4.1	5.9	.03	15	.00	.08
27	.17	16	.80	1.5	1.3	7.3	3.3	2.1	.08	1.6	.00	.00
28	.14	15	.73	.50	1.2	6.0	2.6	2.2	.04	.56	.00	.00
29	.10	5.3	.69	.35	1.2	4.3	2.4	1.6	.03	.36	.00	.00
30	.10	3.4	.66	.28	---	3.6	2.5	1.3	.03	.08	.00	.00
31	.10	---	.62	.24	---	3.1	---	1.1	---	.03	.00	---
TOTAL	7.76	81.35	221.98	16.91	91.65	278.8	231.1	66.29	6.54	19.05	.05	.22
MEAN	.25	2.71	7.16	.55	3.16	8.99	7.70	2.14	.22	.61	.002	.007
MAX	2.3	16	30	1.5	14	74	75	6.7	.94	15	.02	.14
MIN	.00	.05	.62	.19	.27	1.0	2.1	.99	.03	.00	.00	.00
CFSM	.08	.90	2.39	.18	1.05	3.00	2.57	.71	.07	.20	.001	.002
IN.	.10	1.01	2.75	.21	1.14	3.46	2.86	.82	.08	.24	.00	.00

CAL YR 1983 TOTAL 903.41 MEAN 2.48 MAX 53 MIN .00 CFSM .83 IN 11.20
WTR YR 1984 TOTAL 1021.70 MEAN 2.79 MAX 75 MIN .00 CFSM .93 IN 12.66

03357500 BIG WALNUT CREEK NEAR REELSVILLE, IN

LOCATION.--Lat 39°32'11", long 86°58'35", in NW¼SW¼ sec.28, T.13 N., R.5 W., Putnam County, Hydrologic Unit 05120203, on left bank at downstream side of county highway bridge, 1.5 miles southwest of Reelsville, and 4.1 miles upstream from Mill Creek.

DRAINAGE AREA.--326 mi².

PERIOD OF RECORD.--July 1949 to current year. Published as Eel River near Reelsville, October 1952 to September 1956.

REVISED RECORDS.--WSP 1335: 1950. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 588.24 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Dec. 10, 1949, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Flow partly regulated by Soil Conservation Service control structures on tributaries to Little Walnut Creek beginning in 1971.

AVERAGE DISCHARGE.--35 years, 348 ft³/s, 14.49 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,400 ft³/s June 28, 1957, gage height, 18.63 ft, from rating curve extended above 18,000 ft³/s on basis of slope-conveyance method; minimum daily, 1.4 ft³/s Sept. 8, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 12	0200	4410	11.00	Mar. 20	1700	2950	8.93
Mar. 16	1500	4860	11.57	Apr. 22	1100	*5610	*12.51

Minimum daily discharge, 16 ft³/s Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	52	353	180	140	251	433	449	239	89	46	19
2	17	52	293	180	210	252	394	397	209	82	44	18
3	17	57	274	180	1100	236	394	483	191	77	42	23
4	19	54	853	180	600	238	652	536	171	97	40	23
5	42	51	850	180	406	329	1310	493	158	224	38	22
6	26	50	1430	170	300	390	879	692	156	254	37	19
7	29	49	[illegible]	170	250	330	617	648	146	150	37	19
8	25	48	731	165	230	300	504	525	136	109	37	18
9	25	46	555	160	218	280	456	440	129	69	45	18
10	22	50	507	155	855	260	407	385	120	79	66	23
11	20	103	2180	150	1810	250	363	348	111	72	116	26
12	19	205	3530	140	1080	241	342	334	105	73	47	27
13	20	148	1570	130	1600	247	391	334	102	65	38	23
14	22	120	1280	125	1210	242	354	319	191	59	32	24
15	22	108	1220	120	766	471	342	275	294	56	30	26
16	22	133	766	110	595	4270	483	249	191	54	28	25
17	21	154	500	100	580	3030	636	229	146	49	27	23
18	22	146	350	90	554	1640	617	217	122	46	26	21
19	50	129	270	85	543	1180	561	205	109	44	25	19
20	91	133	250	80	471	2410	473	267	99	46	23	17
21	238	161	230	85	402	1970	871	720	92	48	23	17
22	262	140	270	85	353	1430	4600	449	89	46	25	16
23	288	283	300	85	320	2240	2760	532	100	41	24	46
24	179	581	290	87	300	1100	1560	388	202	39	26	51
25	122	401	260	90	302	1460	1080	316	205	38	24	86
26	94	288	230	140	277	1280	829	594	129	64	24	150
27	78	503	230	210	260	974	684	514	116	280	21	102
28	69	1330	240	230	223	846	594	410	184	129	20	65
29	62	806	230	210	246	692	514	360	142	91	21	50
30	57	487	210	180	---	561	514	305	105	69	21	42
31	53	---	190	150	---	487	---	267	---	55	21	---
TOTAL	2052	6868	21572	4402	16202	28887	24614	12680	4489	2714	1074	1058
MEAN	66.2	229	696	142	559	932	820	409	150	87.5	34.6	35.3
MAX	288	1330	3530	230	1810	4270	4600	720	294	280	116	150
MIN	17	46	190	80	140	236	342	205	89	38	20	16
CFSM	.20	.70	2.14	.44	1.72	2.86	2.52	1.26	.46	.27	.11	.11
IN.	.23	.78	2.46	.50	1.85	3.30	2.81	1.45	.51	.31	.12	.12

CAL YR 1983 TOTAL 114895 MEAN 315 MAX 3770 MIN 17 CFSM .97 IN 13.11
WTR YR 1984 TOTAL 126612 MEAN 346 MAX 4600 MIN 16 CFSM 1.06 IN 14.45

03358000 MILL CREEK NEAR CATARACT, IN

LOCATION.--Lat 39°26'00", long 86°45'48", in NE¼SE¼ sec.32, T.12 N., R.3 W., Owen County, Hydrologic Unit 05120203, on right bank at downstream side of bridge on U.S. Highway 231, 3 miles east of Cataract, and at mile 17.5.

DRAINAGE AREA.--245 mi².

PERIOD OF RECORD.--July 1949 to current year.

REVISED RECORDS.--WSP 1505: 1956(P). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 706.40 ft National Geodetic Vertical Datum of 1929. Prior to Nov. 8, 1949, nonrecording gage, and Nov. 8, 1949, to Sept. 22, 1968, water-stage recorder at site 100 ft upstream at same datum.

REMARKS.--Records good except those below 200 cfs, which are fair.

AVERAGE DISCHARGE.--35 years, 261 ft³/s, 14.47 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,400 ft³/s June 24, 1960, gage height, 22.58 ft; minimum daily, 0.1 ft³/s Sept. 7, 28, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 12	1100	2530	12.46	Apr. 5	1200	2820	12.88
Mar. 17	1200	*4440	*15.55	Apr. 23	1100	3380	13.88

Minimum daily discharge, 1.4 ft³/s Oct. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	7.0	183	84	77	154	214	205	96	19	11	5.0
2	1.6	8.0	158	90	229	150	198	179	85	17	11	5.1
3	1.7	16	136	92	1120	148	201	168	73	16	16	6.4
4	2.2	16	605	91	520	144	559	217	63	250	14	7.9
5	8.3	13	443	92	270	192	2650	210	58	234	22	7.5
6	19	10	492	102	182	285	1230	472	53	134	17	6.8
7	6.9	8.4	388	94	137	248	492	417	49	59	12	6.1
8	2.0	7.0	274	90	108	220	342	288	45	37	9.7	5.7
9	1.4	5.9	228	98	94	198	294	218	42	28	8.9	10
10	2.0	8.5	241	175	166	186	253	180	38	24	9.0	15
11	4.7	100	1740	132	920	174	209	155	34	21	9.5	24
12	4.4	108	2430	104	516	150	204	163	31	19	8.5	19
13	7.0	61	1050	93	1130	159	256	160	30	18	7.6	14
14	10	41	777	84	717	165	221	193	44	15	6.8	16
15	10	33	732	79	416	540	203	160	42	14	6.5	22
16	8.6	37	368	71	348	3680	277	133	31	14	6.4	15
17	8.8	48	262	67	358	4190	427	104	29	13	6.6	12
18	8.8	45	215	63	350	2200	376	89	27	12	6.3	9.2
19	9.4	40	170	56	386	825	309	83	26	11	6.4	7.7
20	26	38	140	50	295	1730	250	104	24	12	6.0	6.9
21	103	68	130	44	236	1560	680	512	23	17	5.7	6.6
22	71	58	180	47	199	1080	2370	302	23	15	6.2	6.5
23	74	505	188	54	178	733	3050	515	23	12	14	33
24	45	368	144	62	168	528	1150	263	112	10	9.2	26
25	31	174	127	77	307	811	584	177	34	11	6.6	47
26	23	116	122	152	224	668	414	322	22	19	5.7	135
27	18	685	116	255	184	587	328	213	114	138	5.2	50
28	14	1220	110	164	168	593	275	175	72	38	5.3	21
29	12	414	102	112	162	420	219	168	32	21	6.2	14
30	9.5	231	94	94	---	296	258	129	23	15	5.8	11
31	8.0	---	86	82	---	245	---	112	---	13	5.3	---
TOTAL	552.9	4489.8	12431	2950	10165	23259	18493	6786	1398	1276	276.4	571.4
MEAN	17.8	150	401	95.2	351	750	616	219	46.6	41.2	8.92	19.0
MAX	103	1220	2430	255	1130	4190	3050	515	114	250	22	135
MIN	1.4	5.9	86	44	77	144	198	83	22	10	5.2	5.0
CFSM	.07	.61	1.64	.39	1.43	3.06	2.51	.89	.19	.17	.04	.08
IN.	.08	.68	1.89	.45	1.54	3.53	2.81	1.03	.21	.19	.04	.09

CAL YR 1983 TOTAL 66532.2 MEAN 182 MAX 2840 MIN 1.4 CFSM .74 IN 10.10
WTR YR 1984 TOTAL 82648.5 MEAN 226 MAX 4190 MIN 1.4 CFSM .92 IN 12.55

03359000 MILL CREEK NEAR MANHATTAN, IN

LOCATION.--Lat 39°29'22", long 86°55'50", in SW¼SE¼ sec.11, T.12 N., R.5 W., Putnam County, Hydrologic Unit 05120203, on left bank 200 ft downstream from Cagles Mill, 0.7 mile downstream from Cagles Mill Lake, 0.8 mile upstream from Deer Creek, 5.8 miles south of Manhattan, and at mile 2.0.

DRAINAGE AREA.--294 mi².

PERIOD OF RECORD.--May to September 1931 (fragmentary), October 1938 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1940-41. WSP 2109: Drainage area.

GAGE.--None. Datum of gage was 581.83 ft National Geodetic Vertical Datum of 1929. May 12, 1941 to Sept. 30, 1974, water-stage recorder at site described in "LOCATION" paragraph. See WSP 1725 for history of changes prior to May 12, 1941.

REMARKS.--Flow regulated by Cagles Mill Lake. Daily discharge computed from relation between discharge, head, and gate openings for Cagles Mill Lake beginning Oct. 1, 1974.

COOPERATION.--Records of daily discharge furnished by Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--46 years (1938 to current year), 306 ft³/s, 14.13 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,960 ft³/s Jan. 5, 1950, gage height, 18.38 ft; no flow Aug. 7, 1953.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,990 ft³/s Mar. 30; minimum daily, 13 ft³/s Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	17	897	57	30	103	1940	1510	106	37	18	17
2	15	15	307	57	30	221	1910	1280	106	31	18	17
3	15	15	186	67	35	303	1890	902	106	31	18	17
4	15	15	247	79	162	237	1860	1210	106	134	18	17
5	15	15	486	79	150	263	739	1450	98	451	18	17
6	15	15	753	62	64	623	163	1220	62	409	18	17
7	15	15	749	56	64	821	903	1060	50	114	18	17
8	15	15	419	57	75	450	1450	1050	50	39	18	17
9	15	15	318	57	82	252	1590	1040	50	31	18	17
10	15	15	291	58	135	252	1780	561	50	26	18	18
11	15	15	190	59	194	288	1850	223	50	18	18	18
12	15	22	132	59	269	358	1820	208	38	18	18	17
13	15	33	105	59	179	356	1790	208	30	18	18	17
14	15	44	108	59	102	234	1760	209	33	18	18	17
15	15	52	109	59	444	138	1730	209	33	18	18	17
16	15	52	279	59	924	108	1700	181	33	18	18	17
17	129	51	1090	59	1070	115	1670	120	33	18	18	17
18	197	44	1620	59	1070	119	1640	106	33	18	18	17
19	196	33	1650	51	1060	121	877	106	33	18	18	17
20	195	33	1610	40	1260	123	336	106	33	18	18	17
21	240	37	1560	34	1450	125	356	109	33	18	18	17
22	340	47	1380	28	768	127	184	306	169	18	18	13
23	386	83	715	24	817	127	114	583	561	18	18	17
24	383	146	266	24	623	359	117	940	471	18	18	17
25	301	389	110	24	48	512	118	495	148	18	18	17
26	245	568	45	25	82	574	296	311	46	18	18	17
27	221	562	51	27	233	461	474	497	46	18	17	17
28	90	309	55	28	265	808	779	241	47	18	17	17
29	29	722	57	29	164	1820	941	209	47	18	17	17
30	23	1270	57	29	---	1990	1160	192	47	16	17	17
31	23	---	57	30	---	1970	---	135	---	18	17	---
TOTAL	3238	4664	15899	1494	11849	14358	33937	16977	2748	1679	553	508
MEAN	104	155	513	48.2	409	463	1131	548	91.6	54.2	17.8	16.9
MAX	386	1270	1650	79	1450	1990	1940	1510	561	451	18	18
MIN	15	15	45	24	30	103	114	106	30	16	17	13
CFSM	.35	.53	1.75	.16	1.39	1.58	3.85	1.86	.31	.18	.06	.06
IN.	.41	.59	2.01	.19	1.50	1.82	4.29	2.15	.35	.21	.07	.06

CAL YR 1983 TOTAL 114739 MEAN 314 MAX 1930 MIN 15 CFSM 1.07 IN 14.52
WTR YR 1984 TOTAL 107904 MEAN 295 MAX 1990 MIN 13 CFSM 1.00 IN 13.65

03360000 EEL RIVER AT BOWLING GREEN, IN

LOCATION.--Lat 39°22'38", long 87°01'14", in NE¼NE¼ sec.24, T.11 N., R.6 W., Clay County, Hydrologic Unit 05120203, on left bank 500 ft downstream from bridge on State Highway 46 at Bowling Green, 0.2 mile downstream from Jordan Creek, and at mile 38.4.

DRAINAGE AREA.--830 mi².

PERIOD OF RECORD.--January 1931 to current year. Prior to October 1934, published as "near Centerpoint".

REVISED RECORDS.--WSP 893: 1935, 1937-39. WSP 973: 1937-38, 1939(M). WSP 1335: 1931(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 548.02 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). See WSP 1725 for history of changes prior to Dec. 1, 1949.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Cagles Mill Lake.

AVERAGE DISCHARGE.--53 years, 873 ft³/s, 14.28 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34,000 ft³/s Jan. 4, 1950, gage height, 23.53 ft; minimum daily, 11 ft³/s Oct. 7, 8, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 30.0 ft in 1875, present datum, from information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,260 ft³/s Apr. 22, gage height, 17.58 ft; minimum daily, 35 ft³/s Oct. 11-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	127	1690	360	352	651	2440	2080	544	210	117	55
2	41	117	881	370	434	660	2360	2050	503	184	107	55
3	40	127	689	375	1990	784	2320	1450	471	173	107	53
4	41	124	1270	380	1700	766	2840	1930	437	395	107	52
5	46	118	1610	375	963	1070	5910	2010	411	745	104	53
6	109	112	2260	370	600	1460	2150	2370	368	922	100	53
7	68	107	2590	360	483	1690	1720	2170	328	468	98	52
8	59	104	1740	340	468	1410	2260	1890	310	272	95	52
9	46	101	1130	320	515	881	2220	1710	295	217	93	50
10	40	105	1150	310	963	826	2300	1450	280	155	95	50
11	35	165	2900	290	3090	823	2330	884	262	173	109	60
12	35	263	5150	280	1920	790	2260	847	248	166	132	60
13	35	270	2990	270	2890	832	2390	829	231	160	124	56
14	37	229	2010	260	2260	751	2270	863	234	144	105	57
15	38	226	2120	250	1530	925	2190	748	403	138	93	57
16	38	238	1450	240	1710	5260	2320	686	352	136	84	59
17	84	269	1570	235	1980	6050	2680	602	282	130	81	56
18	212	268	2130	230	1950	2950	2560	538	246	124	78	53
19	218	233	2040	215	1930	2000	2170	512	227	117	74	52
20	328	222	1900	200	1850	3310	1190	538	213	113	71	50
21	503	256	1940	185	2000	3650	2170	1280	201	118	70	49
22	613	264	1960	185	1730	2630	6560	1030	195	118	68	48
23	671	505	1390	190	1060	2170	6540	1420	557	115	74	90
24	613	981	928	200	1530	1860	2960	1500	884	109	78	140
25	490	836	630	280	769	2620	2000	1310	532	102	74	138
26	400	898	530	360	692	2810	1620	1030	318	125	71	411
27	363	1140	470	460	703	2280	1610	1400	297	255	70	243
28	282	2760	430	563	769	1860	1590	937	287	320	66	171
29	175	1700	410	483	686	2570	1750	826	307	213	62	130
30	148	1900	390	411	---	2700	1870	739	241	164	57	109
31	136	---	370	392	---	2540	---	642	---	134	56	---
TOTAL	5986	14765	48718	9739	39517	61579	77550	38271	10464	6956	2720	2614
MEAN	193	492	1572	314	1363	1986	2585	1235	349	224	87.7	87.1
MAX	671	2760	5150	563	3090	6050	6560	2370	884	922	132	411
MIN	35	101	370	185	352	651	1190	512	195	102	56	48
CFSM	.23	.59	1.89	.38	1.64	2.39	3.11	1.49	.42	.27	.11	.11
IN.	.27	.66	2.18	.44	1.77	2.76	3.48	1.72	.47	.31	.12	.12

CAL YR 1983 TOTAL 280433 MEAN 768 MAX 5200 MIN 35 CFSM .93 IN 12.57
WTR YR 1984 TOTAL 318879 MEAN 871 MAX 6560 MIN 35 CFSM 1.05 IN 14.29

03360500 WHITE RIVER AT NEWBERRY, IN

LOCATION.--Lat 38°55'39", long 87°00'41", in NE¼NW¼ sec.30, T.6 N., R.5 W., Greene County, Hydrologic Unit 05120202, on left bank 0.4 mi upstream from bridge on State Highway 57 at Newberry, 1.9 miles downstream from Doans Creek, and at mile 113.0.

DRAINAGE AREA.--4,688 mi^2.

PERIOD OF RECORD.--September 1928 to current year. Prior to October 1948, published as West Fork White River at Newberry.

REVISED RECORDS.--WSP 873: 1937(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 465.59 ft National Geodetic Vertical Datum of 1929. Nonrecording gage prior to Oct. 21, 1928. Prior to Aug. 5, 1982, recording gage 0.3 mile downstream at same datum.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Flow regulated by upstream reservoirs.

AVERAGE DISCHARGE.--56 years, 4,722 ft^3/s, 13.68 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,900 ft^3/s May 21, 1943, gage height, 24.19 ft; minimum daily, 200 ft^3/s Oct. 1, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1875, 27.5 ft Mar. 27, 1913, from floodmarks by Indiana Department of Highways, discharge, 130,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 28,600 ft^3/s Apr. 25, gage height, 19.07 ft; minimum daily, 435 ft^3/s Oct. 3.

NOTE.--No gage-height record Dec. 24 to Jan. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	452	893	7360	3500	2180	5130	10500	9290	4510	1800	1220	708
2	436	881	6640	3300	2380	4780	9300	8610	4200	1650	1100	708
3	435	862	5300	3100	4240	4760	8610	8220	3840	1550	1060	683
4	454	817	5420	2900	6270	4980	9860	8270	3520	3000	1060	651
5	730	822	6460	2700	6840	6900	19900	7860	3260	2370	1050	628
6	624	812	7600	2500	6510	8640	23400	8100	3060	2760	1070	700
7	712	804	8450	2400	5440	8450	21900	8710	2880	3450	1170	683
8	785	756	9190	2400	4230	8000	17700	8580	2720	3200	1380	725
9	640	778	8790	2500	3470	7080	13500	7560	2580	2680	1350	691
10	563	790	7570	2400	3390	6080	10800	6840	2480	2350	1230	651
11	511	887	8120	2300	5290	5470	9270	6180	2360	2030	1180	635
12	480	1450	12500	2100	8090	4990	8500	5420	2280	1810	1170	643
13	480	2540	14200	1900	11100	4710	8640	5500	2210	1660	1460	667
14	480	2440	15900	1700	13200	4640	8340	5780	2170	1550	1330	683
15	526	2330	16500	1600	13500	5000	7860	5430	2150	1460	1110	675
16	700	2070	15800	1600	12300	13200	7610	5070	2520	1390	1020	651
17	651	1900	14100	1500	10700	17000	8740	4590	2460	1300	935	760
18	596	1870	10500	1500	9360	18600	9970	4220	2280	1230	881	717
19	604	1790	8590	1500	8740	21200	10500	3940	2110	1170	838	659
20	1590	1980	7410	1400	8140	24200	10300	3710	1970	1050	803	620
21	4790	2060	6580	1300	7430	25500	11900	3880	1940	986	777	596
22	4270	1870	6830	1400	7160	25300	19900	6070	1820	1000	794	565
23	3150	3050	6550	1500	6550	24500	24400	7680	1750	934	803	612
24	2510	5960	5400	1600	5570	23100	26300	9120	1810	911	794	717
25	2250	5220	4000	1800	6150	22000	28200	8390	2210	892	926	881
26	1910	4340	3500	2000	5740	20500	25600	7230	2340	919	820	1340
27	1630	5070	3400	2300	5720	17700	20800	6510	2190	1000	742	1470
28	1480	12600	3700	2800	5550	16800	15300	6380	1970	1640	700	2010
29	1330	11200	3800	2610	5480	17500	11300	5560	2020	2090	675	1480
30	1170	8650	3800	2450	---	15500	10000	5210	1940	1610	675	1150
31	985	---	3700	2290	---	12800	---	4800	---	1390	683	---
TOTAL	37924	87492	247660	66850	200720	405010	428900	202710	75550	52832	30806	24359
MEAN	1223	2916	7989	2156	6921	13060	14300	6539	2518	1704	994	812
MAX	4790	12600	16500	3500	13500	25500	28200	9290	4510	3450	1460	2010
MIN	435	756	3400	1300	2180	4640	7610	3710	1750	892	675	565
CFSM	.26	.62	1.70	.46	1.48	2.79	3.05	1.40	.54	.36	.21	.17
IN.	.30	.69	1.97	.53	1.59	3.21	3.40	1.61	.60	.42	.24	.19

CAL YR 1983 TOTAL 1620475 MEAN 4440 MAX 29900 MIN 435 CFSM .95 IN 12.86
WTR YR 1984 TOTAL 1860813 MEAN 5084 MAX 28200 MIN 435 CFSM 1.08 IN 14.77

03361000 BIG BLUE RIVER AT CARTHAGE, IN

LOCATION.--Lat 39°44'38", long 85°34'33", in SW¼SW¼ sec.18, T.15 N., R.9 E., Rush County, Hydrologic Unit 05120204, on right bank 300 ft upstream from highway bridge, 0.5 mile northwest of Carthage, 2.2 miles downstream from Three Mile Creek, and at mile 50.7.

DRAINAGE AREA.--184 mi².

PERIOD OF RECORD.--October 1950 to current year. Prior to October 1961, published as Blue River at Carthage.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 859.33 ft National Geodetic Vertical Datum of 1929. Prior to July 19, 1951, nonrecording gage at site 300 ft downstream at same datum.

REMARKS.--Records good. Flow partly regulated by Big Blue River Conservancy District control structures on tributaries to Big Blue River beginning in 1969.

AVERAGE DISCHARGE.--34 years, 198 ft³/s, 14.61 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,900 ft³/s Mar. 4, 1963, gage height, 14.62 ft, from floodmarks, from rating curve extended above 6,200 ft³/s; minimum daily, 17 ft³/s Jan. 18, Aug. 5, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft³/s and maximum (*);

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 12	1300	2580	8.15	Apr. 22	2200	*3390	*9.21
Mar. 16	1600	2040	7.21				

Minimum daily discharge, 38 ft³/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	62	229	130	118	157	238	243	139	81	68	54
2	39	63	200	125	204	153	217	222	133	81	80	51
3	38	79	187	125	1110	149	224	229	128	84	77	58
4	47	78	466	120	466	145	330	231	122	252	79	58
5	101	71	538	120	252	180	821	208	117	701	87	58
6	61	68	582	115	180	264	670	220	115	364	76	56
7	52	65	478	105	147	231	414	213	110	217	75	51
8	47	63	317	98	133	208	322	206	107	151	178	49
9	46	60	262	92	129	174	279	197	104	126	92	48
10	44	218	248	88	661	161	245	184	100	114	80	65
11	45	1060	777	85	1110	153	220	180	98	103	87	56
12	46	489	2220	82	588	141	208	180	97	99	122	53
13	96	286	1070	78	554	145	259	168	95	93	79	51
14	72	220	732	75	434	147	229	161	104	88	72	74
15	59	243	630	72	343	240	220	153	95	86	68	67
16	54	420	448	70	296	1710	296	147	92	85	67	56
17	52	294	389	70	279	982	501	143	92	80	66	52
18	55	217	337	70	259	624	501	141	89	80	74	53
19	56	180	294	65	245	466	414	135	89	80	69	53
20	100	176	272	60	206	768	380	161	88	81	64	54
21	142	182	255	58	184	878	348	505	91	84	62	52
22	176	155	330	62	170	645	1760	304	87	78	65	51
23	244	389	238	66	159	560	2120	501	114	76	67	71
24	147	732	180	90	153	603	979	340	100	74	63	81
25	103	386	130	260	189	618	688	245	92	76	60	95
26	87	264	140	180	238	636	505	217	88	88	58	259
27	83	236	150	304	240	457	405	180	91	95	57	129
28	75	800	160	172	206	400	353	176	87	81	76	97
29	67	475	150	143	174	370	304	176	84	76	66	85
30	65	291	140	133	---	299	286	159	83	73	59	78
31	64	---	130	120	---	259	---	147	---	71	57	---
TOTAL	2402	8322	12679	3433	9427	12923	14736	6672	3031	3918	2350	2115
MEAN	77.5	277	409	111	325	417	491	215	101	126	75.8	70.5
MAX	244	1060	2220	304	1110	1710	2120	505	139	701	178	259
MIN	38	60	130	58	118	141	208	135	83	71	57	48
CFSM	.42	1.51	2.22	.60	1.77	2.27	2.67	1.17	.55	.69	.41	.38
IN.	.49	1.68	2.56	.69	1.91	2.61	2.98	1.35	.61	.79	.48	.43

CAL YR 1983 TOTAL 64136 MEAN 176 MAX 2220 MIN 35 CFSM .96 IN 12.97
WTR YR 1984 TOTAL 82008 MEAN 224 MAX 2220 MIN 38 CFSM 1.22 IN 16.58

03361500 BIG BLUE RIVER AT SHELBYVILLE, IN

LOCATION.--Lat 39°31'45", long 85°46'55", in SE¼SE¼ sec.31, T.13 N., R.7 E., Shelby County, Hydrologic Unit 05120204, on left bank 0.2 mile downstream from bridge on State Highway 9 in Shelbyville, 0.6 mile downstream from Little Blue River, and at mile 23.9.

DRAINAGE AREA.--421 mi².

PERIOD OF RECORD.--September 1943 to current year. Prior to October 1961, published as Blue River at Shelbyville.

REVISED RECORDS.--WSP 1505: 1944. WSP 1909: 1959(M). WSP 2109: Drainage area. WDR IN-79-1: 1975.

GAGE.--Water-stage recorder. Datum of gage is 737.67 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1953, nonrecording gage at bridge 0.2 mile upstream at datum 3.5 ft higher.

REMARKS.--Records good.

AVERAGE DISCHARGE.--41 years, 462 ft³/s, 14.90 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,800 ft³/s Mar. 5, 1963, gage height, 17.70 ft; minimum daily, 27 ft³/s Jan. 18, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of about 20.2 ft from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,400 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 13	1000	3840	11.44	Apr. 23	1600	*5360	*13.17

Minimum daily discharge, 48 ft³/s Oct. 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	109	641	295	179	381	584	633	314	148	116	81
2	48	103	508	290	234	366	521	557	296	141	116	76
3	48	106	453	285	1590	343	495	535	277	145	132	81
4	54	125	749	280	1460	325	637	589	255	304	173	87
5	84	119	1210	270	728	397	1490	544	245	736	182	87
6	113	109	1130	260	453	749	1600	601	234	898	156	87
7	71	106	1120	234	300	736	1120	649	227	474	135	81
8	61	103	805	211	270	621	827	605	214	321	191	76
9	56	99	645	204	248	491	694	544	207	245	185	73
10	56	164	575	201	645	424	605	487	198	211	151	79
11	56	1450	994	185	2220	381	521	449	188	188	135	96
12	61	1370	3280	180	1470	332	478	433	182	176	159	81
13	81	792	3650	182	1320	332	530	408	179	161	151	76
14	125	557	1980	170	1160	354	526	385	231	151	125	87
15	93	470	1610	164	871	470	500	354	211	145	119	122
16	76	766	1180	164	732	2450	575	332	185	138	109	103
17	68	770	880	161	682	3030	867	318	176	132	103	87
18	68	557	728	160	641	1770	1050	307	170	125	128	84
19	68	433	600	140	617	1340	912	300	167	122	116	81
20	106	373	500	135	526	1740	796	321	164	122	99	79
21	204	377	504	130	445	2440	880	758	164	128	93	76
22	221	339	649	140	393	1840	2920	788	161	122	96	71
23	526	535	517	150	358	1560	5080	1190	182	116	96	81
24	381	1630	400	200	339	1380	3930	1090	234	109	93	109
25	259	1140	300	450	424	1220	1970	745	194	116	87	138
26	201	762	310	370	649	1370	1470	597	173	191	84	332
27	167	621	330	500	661	1100	1160	478	170	255	81	314
28	156	1470	350	400	575	966	948	424	167	191	93	201
29	135	1390	330	292	453	921	801	412	153	161	119	164
30	119	885	320	231	---	766	732	366	151	132	96	141
31	109	---	300	190	---	653	---	339	---	119	87	---
TOTAL	3919	17830	27548	7224	20643	31248	35213	16538	6069	6723	3806	3331
MEAN	126	594	889	233	712	1008	1174	533	202	217	123	111
MAX	526	1630	3650	500	2220	3030	5080	1190	314	898	191	332
MIN	48	99	300	130	179	325	478	300	151	109	81	71
CFSM	.30	1.41	2.11	.55	1.69	2.39	2.79	1.27	.48	.52	.29	.26
IN.	.35	1.58	2.43	.64	1.82	2.76	3.11	1.46	.54	.59	.34	.29

CAL YR 1983 TOTAL 136753 MEAN 375 MAX 3650 MIN 47 CFSM .89 IN 12.08
WTR YR 1984 TOTAL 180098 MEAN 492 MAX 5080 MIN 48 CFSM 1.17 IN 15.91

03361650 SUGAR CREEK AT NEW PALESTINE, IN

LOCATION.--Lat 39°42'51", long 85°53'08", in SE¼SW¼ sec.29, T.15 N., R.6 E., Hancock County, Hydrologic Unit 05120204, on left bank 10 ft downstream from bridge on County Road 450 West, 0.5 mile south of New Palestine, 3.1 miles upstream from Little Sugar Creek, and 37.3 miles upstream from mouth.

DRAINAGE AREA.--93.9 mi^2.

PERIOD OF RECORD.--October 1967 to current year.

REVISED RECORDS.--WDR IN-76-1: 1975.

GAGE.--Water-stage recorder. Datum of gage is 786.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--17 years, 101 ft^3/s, 14.61 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,850 ft^3/s June 23, 1974, gage height, 9.12 ft; maximum gage height, 10.34 ft Feb. 23, 1979 (ice jam); minimum daily discharge, 2.4 ft^3/s Oct. 3, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 950 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 22	1400	*1060	*7.22

Minimum daily discharge, 2.4 ft^3/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	9.9	136	66	37	76	105	111	61	15	12	10
2	2.7	10	107	62	45	70	95	95	56	15	13	9.4
3	2.4	12	93	58	452	60	94	91	51	14	13	12
4	4.4	12	252	55	409	64	123	102	46	65	23	13
5	11	12	358	52	262	82	258	99	43	160	24	17
6	6.3	13	346	50	98	165	289	106	40	231	16	15
7	4.8	16	300	48	66	178	198	106	38	119	13	12
8	4.6	15	218	45	58	140	144	98	35	73	14	9.9
9	4.7	13	160	43	52	112	121	88	33	52	12	9.4
10	4.8	28	141	40	189	92	106	79	32	41	14	11
11	5.1	235	353	38	441	83	93	73	29	35	32	9.4
12	5.8	372	717	37	340	74	88	70	27	31	14	9.4
13	14	270	817	36	369	70	92	65	28	26	20	7.9
14	14	147	638	36	325	68	89	61	36	23	23	13
15	13	107	400	35	229	104	87	56	30	21	16	14
16	11	108	283	33	177	763	109	53	28	19	12	10
17	8.9	140	194	32	151	756	219	50	26	18	14	8.9
18	7.5	111	149	31	137	563	239	49	23	17	29	7.9
19	6.6	89	120	29	130	331	213	48	23	17	15	7.9
20	14	80	110	27	116	499	187	73	21	16	11	7.5
21	26	77	103	25	98	609	263	238	21	16	10	7.0
22	31	71	113	27	86	592	819	253	20	15	9.9	6.3
23	34	125	100	30	78	424	740	307	19	14	12	12
24	42	255	90	40	73	323	741	270	22	13	10	16
25	33	254	80	54	77	289	409	168	21	14	9.4	21
26	24	157	84	71	91	320	275	132	18	23	8.4	111
27	18	137	87	152	103	269	204	104	19	24	8.4	56
28	15	322	90	118	100	219	160	91	17	20	23	38
29	13	351	82	69	85	178	128	85	16	17	28	27
30	11	214	75	48	---	140	125	76	15	14	15	22
31	11	---	70	39	---	118	---	68	---	12	12	---
TOTAL	406.2	3762.9	6866	1526	4874	7837	6813	3365	894	1190	486.1	530.9
MEAN	13.1	125	221	49.2	168	253	227	109	29.8	38.4	15.7	17.7
MAX	42	372	817	152	452	763	819	307	61	231	32	111
MIN	2.4	9.9	70	25	37	64	87	48	15	12	8.4	6.3
CFSM	.14	1.33	2.35	.52	1.79	2.69	2.42	1.16	.32	.41	.17	.19
IN.	.16	1.49	2.72	.60	1.93	3.10	2.70	1.33	.35	.47	.19	.21

CAL YR 1983 TOTAL 28210.9 MEAN 77.3 MAX 1100 MIN 2.4 CFSM .82 IN 11.18
WTR YR 1984 TOTAL 38551.1 MEAN 105 MAX 819 MIN 2.4 CFSM 1.12 IN 15.27

03361850 BUCK CREEK AT ACTON, IN

LOCATION.--Lat 39°39'25", long 85°57'27", in NW¼SE¼ sec.15, T.14 N., R.5 E., Marion County, Hydrologic Unit 05120204, on left bank 30 ft downstream from McGregor Road bridge, 0.5 mile east of Acton, and 4.1 miles upstream from mouth.

DRAINAGE AREA.--78.8 mi².

PERIOD OF RECORD.--October 1967 to current year.

REVISED RECORDS.--WDR IN-79-1: 1969 (M).

GAGE.--Water-stage recorder. Datum of gage is 757.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--17 years, 89.6 ft³/s, 15.44 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,140 ft³/s July 20, 1969, gage height, 14.99 ft; minimum daily, 0.60 ft³/s Oct. 1, 4, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 16	1230	1870	9.90	Apr. 22	1930	*1910	*9.96
Mar. 20	1530	1030	7.59				

Minimum daily discharge, 1.3 ft³/s Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	13	76	26	18	53	71	76	43	9.3	15	3.5
2	2.8	9.4	61	24	78	58	63	65	39	8.7	13	6.4
3	3.2	18	58	21	421	58	73	66	32	8.4	13	11
4	3.8	18	350	20	158	56	109	82	27	37	46	12
5	7.3	17	272	20	80	114	224	79	28	370	88	8.0
6	7.0	17	217	20	46	209	163	114	26	250	35	9.3
7	4.4	15	179	19	35	159	109	111	20	96	23	3.5
8	3.8	9.5	125	18	30	123	86	89	16	53	185	5.9
9	4.1	11	97	17	26	91	76	73	19	36	78	6.4
10	4.2	35	95	16	172	77	67	61	17	28	40	12
11	2.5	231	372	15	364	69	58	54	16	23	148	4.6
12	2.6	87	657	14	230	60	54	51	15	22	53	5.7
13	14	50	317	11	294	58	75	44	15	17	29	5.7
14	10	33	240	10	223	62	62	37	34	15	21	14
15	5.6	29	210	8.9	153	145	69	36	18	13	17	17
16	4.6	49	130	9.2	128	1450	105	33	16	12	14	9.0
17	3.4	44	96	9.0	114	599	213	30	14	11	12	4.6
18	3.7	34	77	8.3	101	333	210	26	14	13	12	3.0
19	3.0	27	55	8.2	104	240	156	29	19	9.7	11	5.0
20	21	31	45	7.6	86	702	148	51	16	8.7	8.4	5.7
21	48	34	48	8.0	73	483	240	271	15	11	9.7	5.5
22	32	25	55	8.4	62	390	1400	151	13	5.0	14	5.3
23	34	162	45	9.4	56	318	925	440	37	4.3	21	19
24	16	233	37	13	53	223	398	207	40	7.4	6.9	19
25	13	115	30	38	72	216	259	124	17	8.0	4.8	14
26	9.7	76	32	51	94	200	188	116	14	51	7.4	144
27	6.0	96	33	98	82	167	138	80	19	55	6.9	49
28	4.3	438	33	40	70	154	107	76	16	92	13	30
29	12	198	32	28	56	123	84	75	12	77	12	22
30	15	115	27	22	---	92	98	60	10	27	6.4	17
31	15	---	27	19	---	79	---	51	---	19	5.7	---
TOTAL	317.3	2269.9	4128	637.0	3479	7161	6028	2858	637	1457.5	969.2	477.1
MEAN	10.2	75.7	133	20.5	120	231	201	92.2	21.2	47.0	31.3	15.9
MAX	48	438	657	98	421	1450	1400	440	43	370	185	144
MIN	1.3	9.4	27	7.6	18	53	54	26	10	4.3	4.8	3.0
CFSM	.13	.96	1.69	.26	1.52	2.93	2.55	1.17	.27	.60	.40	.20
IN.	.15	1.07	1.95	.30	1.64	3.38	2.85	1.35	.30	.69	.46	.23

CAL YR 1983 TOTAL 19562.5 MEAN 53.6 MAX 676 MIN 1.2 CFSM .68 IN 9.23
WTR YR 1984 TOTAL 30419.0 MEAN 83.1 MAX 1450 MIN 1.3 CFSM 1.06 IN 14.36

03362000 YOUNGS CREEK NEAR EDINBURGH, IN

LOCATION.--Lat 39°25'08", long 86°00'18", in SE¼SW¼ sec.5, T.11 N., R.5 E., Johnson County, Hydrologic Unit 05120204, on left bank on upstream side of county highway bridge, 0.5 mile southwest of Amity, 2.0 miles upstream from mouth, and 5 miles northwest of Edinburgh.

DRAINAGE AREA.--107 mi².

PERIOD OF RECORD.--October 1942 to current year. Prior to December 1942 monthly discharge only, published in WSP 1305. Prior to October 1977, published as "near Edinburg".

REVISED RECORDS.--WSP 1335: 1944. WSP 1909: 1958. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 670.20 ft National Geodetic Vertical Datum of 1929. Prior to June 30, 1955, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--42 years, 106 ft³/s, 13.45 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,700 ft³/s Jan. 27, 1952, gage height, 13.4 ft; minimum daily, 0.5 ft³/s Sept. 29, Oct. 20, 21, 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,300 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 22	1500	*3610	*10.12

Minimum daily discharge, 2.6 ft³/s Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	13	132	29	31	83	117	104	63	17	8.1	4.1
2	2.6	12	114	29	92	88	109	93	56	15	7.7	3.2
3	3.2	12	105	30	301	86	110	93	49	15	7.5	3.9
4	4.7	12	243	32	160	85	286	97	43	29	9.7	4.6
5	44	12	233	33	100	144	820	94	41	32	11	4.0
6	18	11	215	35	67	304	355	180	38	24	13	4.2
7	8.6	10	176	40	48	238	224	148	35	18	9.7	3.8
8	4.4	11	141	36	41	184	170	123	32	14	8.1	3.8
9	3.5	11	122	35	36	136	151	104	29	13	7.3	3.8
10	3.2	33	111	36	106	121	133	92	27	13	7.1	3.9
11	3.1	398	366	34	219	109	115	85	25	12	12	3.9
12	3.5	210	758	31	183	93	109	88	24	11	8.8	3.5
13	13	124	368	27	291	93	126	83	24	11	6.5	3.4
14	12	92	285	24	249	101	110	94	84	10	5.7	5.1
15	8.5	90	265	21	179	200	102	77	54	9.7	5.5	4.9
16	5.2	145	183	20	151	1020	131	66	35	9.3	5.2	3.8
17	4.9	133	141	19	136	496	234	59	46	9.2	5.1	3.9
18	4.7	104	120	18	124	306	210	55	57	8.5	5.5	4.2
19	4.9	84	100	17	129	233	169	51	85	8.0	5.4	4.1
20	72	88	93	17	113	652	139	52	42	7.8	4.6	3.8
21	179	94	88	17	99	543	674	266	31	9.2	4.6	3.6
22	152	75	128	17	87	473	2880	145	27	8.2	4.6	3.5
23	146	301	78	18	80	356	1140	662	50	8.2	5.0	9.8
24	88	433	60	27	75	257	453	298	38	7.5	4.6	20
25	59	210	50	88	110	234	304	183	28	11	4.3	16
26	40	144	50	113	135	206	223	144	23	15	4.0	25
27	30	173	48	191	119	185	174	112	25	21	4.0	13
28	24	625	46	69	107	217	143	104	34	17	5.0	8.4
29	18	290	38	44	90	212	123	95	24	10	5.1	6.7
30	15	177	31	35	---	155	126	80	19	7.8	4.8	5.7
31	13	---	29	28	---	130	---	71	---	7.9	4.5	---
TOTAL	992.2	4127	4917	1210	3658	7740	10160	3998	1188	409.3	204.0	191.6
MEAN	32.0	138	159	39.0	126	250	339	129	39.6	13.2	6.58	6.39
MAX	179	625	758	191	301	1020	2880	662	85	32	13	25
MIN	2.6	10	29	17	31	83	102	51	19	7.5	4.0	3.2
CFSM	.30	1.29	1.49	.36	1.18	2.34	3.17	1.21	.37	.12	.06	.06
IN.	.34	1.43	1.71	.42	1.27	2.69	3.53	1.39	.41	.14	.07	.07

CAL YR 1983 TOTAL 32547.9 MEAN 89.2 MAX 1690 MIN 2.6 CFSM .83 IN 11.32
WTR YR 1984 TOTAL 38795.1 MEAN 106 MAX 2880 MIN 2.6 CFSM .99 IN 13.49

03362500 SUGAR CREEK NEAR EDINBURGH, IN

LOCATION.--Lat 39°21'39", long 85°59'51", in SW¼SE¼ sec.29, T.11 N., R.5 E., Johnson County, Hydrologic Unit 05120204, on left bank 50 ft upstream from highway bridge in Camp Atterbury, 1.3 miles upstream from confluence with Blue River, 1.5 miles northwest of Edinburgh, and at mile 1.3.

DRAINAGE AREA.--474 mi².

PERIOD OF RECORD.--October 1942 to current year. Prior to February 1943 monthly discharge only, published in WSP 1305. Prior to October 1977, published as "near Edinburg".

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 646.23 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1952, nonrecording gage on downstream side of old highway bridge, 100 ft downstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--42 years, 487 ft³/s, 13.95 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,600 ft³/s May 29, 1956, gage height, 18.38 ft; minimum daily, 9.2 ft³/s Sept. 19, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,200 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 23	0800	*7410	*12.87

Minimum daily discharge, 24 ft³/s Oct. 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	64	765	250	196	353	575	616	320	114	94	51
2	24	66	584	230	252	351	511	525	290	108	87	46
3	24	64	501	220	1230	343	474	472	266	105	84	46
4	28	61	780	210	1440	334	634	488	241	139	92	51
5	75	62	1550	200	842	410	2020	493	225	325	176	59
6	64	63	1330	200	495	1030	1590	568	214	767	229	55
7	53	63	1210	210	329	1070	1130	740	198	539	152	57
8	42	61	955	200	300	866	829	626	187	312	114	50
9	32	64	745	170	270	661	686	535	173	218	237	45
10	28	80	633	175	364	551	599	447	166	176	156	46
11	28	762	977	155	1780	480	517	394	159	152	159	50
12	29	1090	2780	150	1500	412	458	370	149	136	233	50
13	40	807	2730	150	1490	384	493	343	146	126	136	43
14	50	551	2070	150	1490	386	497	347	202	111	100	48
15	60	372	1680	140	1090	509	450	299	218	105	97	53
16	49	428	1200	135	849	2680	480	270	169	100	84	65
17	41	489	865	130	734	3830	849	249	162	94	75	53
18	38	439	675	130	646	2630	1110	233	166	89	71	48
19	35	330	550	120	624	1680	1000	218	206	87	84	42
20	80	281	480	110	577	2150	836	218	169	84	75	40
21	276	293	436	100	489	3310	1090	762	149	84	63	42
22	278	266	509	105	422	2540	4170	920	156	84	59	40
23	328	526	485	110	376	2150	7100	1730	173	77	59	50
24	240	1580	350	150	348	1590	4520	1510	408	73	67	69
25	170	1180	300	330	392	1320	2430	992	343	75	59	94
26	131	831	310	375	522	1270	1560	735	198	87	51	108
27	104	643	330	709	550	1160	1170	597	162	173	50	290
28	89	1800	350	571	507	1070	937	503	166	173	51	160
29	76	1700	310	354	415	1040	746	472	146	206	55	116
30	65	1120	280	263	---	818	677	408	126	166	75	92
31	63	---	260	200	---	662	---	361	---	111	59	---
TOTAL	2664	16136	26980	6702	20519	38040	40138	17441	6053	5196	3183	2059
MEAN	85.9	538	870	216	708	1227	1338	563	202	168	103	68.6
MAX	328	1800	2780	709	1780	3830	7100	1730	408	767	237	290
MIN	24	61	260	100	196	334	450	218	126	73	50	40
CFSM	.18	1.14	1.84	.46	1.49	2.59	2.82	1.19	.43	.35	.22	.15
IN.	.21	1.27	2.12	.53	1.61	2.99	3.15	1.37	.48	.41	.25	.16

CAL YR 1983 TOTAL 140166 MEAN 384 MAX 4580 MIN 22 CFSM .81 IN 11.00
WTR YR 1984 TOTAL 185111 MEAN 506 MAX 7100 MIN 24 CFSM 1.07 IN 14.53

03363000 DRIFTWOOD RIVER NEAR EDINBURGH, IN

LOCATION.--Lat 39°20'21", long 85°59'11", in NW¼SW¼ sec.4, T.10 N., R.5 E., Bartholomew County, Hydrologic Unit 05120204, on left bank at downstream side of highway bridge, 0.8 mile downstream from confluence of Big Blue River and Sugar Creek, 1.5 miles southwest of Edinburgh, and at mile 14.1.

DRAINAGE AREA.--1,060 mi².

PERIOD OF RECORD.--October 1940 to current year. Prior to July 1941 monthly discharge only, published in WSP 1305. Prior to October 1977, published as "near Edinburg".

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 636.99 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 7, 1941, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--44 years, 1,145 ft³/s, 14.67 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,500 ft³/s Mar. 6, 1963, gage height, 16.97 ft; minimum daily, 38 ft³/s Sept. 23, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 20.3 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 7,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 17	2000	7450	11.18	Apr. 23	1700	*11700	*13.56

Minimum daily discharge, 101 ft³/s Oct. 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	234	1900	640	514	958	1450	1650	859	388	308	194
2	101	227	1470	640	552	903	1300	1430	800	371	296	183
3	101	217	1270	640	2000	876	1230	1310	753	362	296	183
4	104	214	1530	625	3640	843	1700	1320	701	445	325	187
5	151	221	3000	620	2140	925	4070	1320	665	843	441	197
6	175	217	2910	625	1200	1810	3800	1370	640	1740	505	194
7	172	211	2800	645	900	2110	2830	1660	611	1420	388	190
8	145	207	2270	591	742	1780	2080	1480	581	942	333	176
9	131	204	1790	567	711	1470	1720	1320	552	691	491	166
10	125	231	1510	562	822	1200	1490	1180	533	562	388	169
11	123	1210	1840	519	3480	1080	1310	1070	510	491	371	176
12	123	2990	5090	487	4030	964	1200	1010	491	450	428	180
13	151	2290	6580	505	3330	908	1230	958	477	419	362	166
14	169	1620	6470	487	3300	914	1260	936	543	388	308	169
15	198	1230	4520	459	2500	1050	1180	854	596	371	284	183
16	175	1300	3270	455	1970	4020	1230	790	510	354	268	212
17	157	1610	2350	450	1720	6930	1830	742	482	341	253	190
18	154	1420	1860	428	1560	6240	2410	706	482	325	249	173
19	148	1160	1500	367	1470	3900	2250	681	510	312	272	166
20	211	1010	1300	350	1370	4170	1910	676	468	308	253	159
21	444	975	1200	320	1190	6460	2300	1340	450	308	230	156
22	535	936	1320	335	1050	6000	6760	2010	450	304	223	153
23	691	1230	1250	350	953	4900	11100	3040	473	292	223	169
24	769	3020	1000	428	892	3790	10100	3220	753	280	223	201
25	582	3140	750	640	942	3240	6840	2240	701	276	212	269
26	453	2170	800	806	1230	3100	4240	1700	510	304	201	296
27	372	1660	850	1030	1390	2890	3170	1390	473	487	194	701
28	327	3130	900	1080	1320	2560	2540	1200	459	500	197	491
29	292	3930	820	779	1110	2400	2070	1120	432	477	212	379
30	262	2760	760	635	---	1980	1850	1030	401	419	242	321
31	241	---	700	519	---	1650	---	936	---	337	208	---
TOTAL	7883	40974	65580	17584	48028	82021	88450	41689	16866	15507	9184	6749
MEAN	254	1366	2115	567	1656	2646	2948	1345	562	500	296	225
MAX	769	3930	6580	1080	4030	6930	11100	3220	859	1740	505	701
MIN	101	204	700	320	514	843	1180	676	401	276	194	153
CFSM	.24	1.29	2.00	.54	1.56	2.50	2.78	1.27	.53	.47	.28	.21
IN.	.28	1.44	2.30	.62	1.69	2.88	3.10	1.46	.59	.54	.32	.24

CAL YR 1983 TOTAL 337378 MEAN 924 MAX 8430 MIN 101 CFSM .87 IN 11.84
WTR YR 1984 TOTAL 440515 MEAN 1204 MAX 11100 MIN 101 CFSM 1.14 IN 15.46

03363500 FLATROCK RIVER AT ST. PAUL, IN

LOCATION.--Lat 39°25'03", long 85°38'03", in SE¼NE¼ sec.9, T.11 N., R.8 E., Shelby County, Hydrologic Unit 05120205, on right bank 500 ft downstream from highway bridge, 0.8 mile southwest of St. Paul, 1.5 miles downstream from Mill Creek, and at mile 34.4.

DRAINAGE AREA.--303 mi^2.

PERIOD OF RECORD.--October 1930 to current year. Prior to October 1958, published as Flatrock Creek at St. Paul.

REVISED RECORDS.--WSP 853: 1934-36. WSP 973: 1942. WSP 1335: 1933, 1936. WSP 1725: 1957(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 764.84 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 21, 1938, nonrecording gage at site 500 ft upstream at same datum.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--54 years, 318 ft^3/s, 14.25 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,500 ft^3/s Jan. 5, 1949, gage height, 10.60 ft; maximum recorded gage height, 12.37 ft May 24, 1968; minimum daily discharge, 0.6 ft^3/s Aug. 7, 1931.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of approximately 20.5 ft, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 12	0400	2,580	4.23
Apr. 22	1300	*3,870	*5.33

Minimum daily discharge, 5.2 ft^3/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	36	474	170	130	233	430	430	225	75	38	14
2	5.5	34	372	164	135	225	377	361	213	62	35	13
3	5.2	33	323	167	1060	205	355	366	201	60	38	14
4	5.4	33	487	164	1200	193	501	443	185	128	36	18
5	12	32	652	156	592	328	2240	418	174	178	38	20
6	18	32	644	154	300	614	1830	501	156	221	43	17
7	15	32	607	170	250	563	1300	563	142	167	35	16
8	11	31	501	153	230	455	820	487	132	125	73	13
9	9.3	31	401	132	220	355	622	436	122	100	48	13
10	9.2	67	350	150	233	293	507	377	113	85	38	14
11	7.9	521	803	135	909	260	424	328	108	77	58	13
12	6.6	738	2300	130	994	217	366	318	102	73	45	13
13	17	424	2050	130	706	233	406	308	100	66	39	12
14	29	269	1820	130	629	303	418	308	119	56	36	12
15	22	251	1190	120	453	468	443	279	113	52	30	18
16	17	514	856	120	372	2020	754	255	100	48	25	24
17	15	521	592	110	328	1990	1160	238	116	45	24	19
18	13	355	455	100	303	1800	1100	233	97	41	26	16
19	12	274	377	90	293	1070	894	233	90	38	25	13
20	32	233	300	80	274	1300	706	251	85	36	21	12
21	88	229	313	70	233	1620	901	871	80	36	19	10
22	110	217	418	70	209	1600	2970	762	77	36	18	9.5
23	188	443	350	80	189	1220	2910	1170	105	35	18	16
24	176	1110	300	100	185	1010	2720	1100	145	30	19	33
25	117	915	200	288	246	924	1620	714	122	33	17	68
26	85	570	210	225	395	894	1060	521	92	75	16	60
27	68	481	230	462	437	842	812	389	87	213	14	62
28	58	1270	250	300	389	722	660	350	80	100	22	52
29	47	1140	230	201	288	778	535	323	68	68	27	39
30	42	770	210	142	---	652	507	274	70	52	22	33
31	39	---	190	135	---	507	---	242	---	43	17	---
TOTAL	1285.9	11607	18455	4798	12182	23894	30348	13849	3619	2454	960	686.5
MEAN	41.5	387	595	155	420	771	1012	447	121	79.2	31.0	22.9
MAX	188	1270	2300	462	1200	2020	2970	1170	225	221	73	68
MIN	5.2	31	190	70	130	193	355	233	68	30	14	9.5
CFSM	.14	1.28	1.96	.51	1.39	2.55	3.34	1.48	.40	.26	.10	.08
IN.	.16	1.43	2.27	.59	1.50	2.93	3.73	1.70	.44	.30	.12	.08

CAL YR 1983 TOTAL 112687.4 MEAN 309 MAX 7540 MIN 2.9 CFSM 1.02 IN 13.83
WTR YR 1984 TOTAL 124138.4 MEAN 339 MAX 2970 MIN 5.2 CFSM 1.12 IN 15.24

03363900 FLATROCK RIVER AT COLUMBUS, IN

LOCATION.--Lat 39°14'06", long 85°55'36", in NE¼SW¼ sec.12, T.9 N., R.5 E., Bartholomew County, Hydrologic Unit 05120205, on left bank at downstream side of bridge on U.S. Highway 31 (bypass), 0.2 mile northwest of Columbus city limits, and 2.6 miles upstream from mouth.

DRAINAGE AREA.--534 mi².

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 610.14 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--17 years, 594 ft³/s, 15.11 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,000 ft³/s May 25, 1968, gage height, 15.87 ft; minimum daily, 22 ft³/s Oct. 5, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 12	2300	4230	9.79	Apr. 23	0900	*6740	*11.60
Apr. 5	2300	4190	9.75				

Minimum daily discharge, 34 ft³/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	88	1030	350	356	646	916	930	437	162	125	64
2	35	87	834	340	365	590	823	812	403	173	116	59
3	34	85	729	340	727	573	766	758	374	155	109	64
4	36	83	828	340	1550	544	848	811	343	230	109	60
5	38	81	1130	340	1270	567	3000	836	322	350	120	59
6	36	80	1110	340	719	1220	3520	834	305	430	118	59
7	36	80	1040	350	580	1300	2490	1070	286	400	113	60
8	38	79	942	325	471	1090	1710	965	270	319	105	57
9	38	78	818	310	434	900	1310	872	251	263	118	55
10	38	86	719	300	434	775	1100	779	239	224	113	55
11	37	392	768	290	1010	695	947	696	224	198	116	53
12	37	984	3230	280	1560	623	840	652	212	176	111	53
13	40	852	3690	270	1360	588	833	611	200	165	111	52
14	39	593	3160	270	1320	688	860	608	218	155	96	52
15	40	477	2440	260	1110	807	845	564	236	144	96	50
16	44	668	1790	250	920	2130	956	514	227	137	89	50
17	43	906	1360	230	826	3000	1520	479	206	132	83	50
18	42	753	1100	210	781	2760	1740	451	218	123	81	57
19	40	598	950	190	742	2020	1530	431	230	116	77	53
20	48	517	700	170	708	1900	1260	419	200	111	77	50
21	72	481	650	150	641	2910	1190	842	187	113	73	48
22	110	458	770	150	579	2670	3220	1220	192	107	71	47
23	155	517	680	155	533	2350	5720	1440	181	105	70	55
24	217	1510	600	200	507	1840	4400	1850	312	102	66	55
25	198	1520	400	450	564	1630	3250	1310	305	100	66	62
26	158	1150	430	600	823	1510	2130	968	251	109	66	102
27	130	883	470	704	949	1440	1600	756	224	181	64	100
28	113	1630	500	709	910	1300	1320	647	209	322	64	89
29	102	1890	460	588	768	1390	1130	617	189	257	64	87
30	95	1450	420	462	---	1260	1020	545	170	192	68	73
31	90	---	380	374	---	1060	---	476	---	147	68	---
TOTAL	2214	19056	34028	10297	23517	42776	52794	24763	7621	5898	2823	1830
MEAN	71.4	635	1098	332	811	1380	1760	799	254	190	91.1	61.0
MAX	217	1890	3690	709	1560	3000	5720	1850	437	430	125	102
MIN	34	78	380	150	356	544	766	419	170	100	64	47
CFSM	.13	1.19	2.06	.62	1.52	2.58	3.30	1.50	.48	.36	.17	.11
IN.	.15	1.33	2.37	.72	1.64	2.98	3.68	1.73	.53	.41	.20	.13

CAL YR 1983 TOTAL 193334 MEAN 530 MAX 10300 MIN 33 CFSM .99 IN 13.47
WTR YR 1984 TOTAL 227617 MEAN 622 MAX 5720 MIN 34 CFSM 1.17 IN 15.86

03364000 EAST FORK WHITE RIVER AT COLUMBUS, IN

LOCATION.--Lat 39°12'00", long 85°55'32", in NE¼NW¼ sec.25, T.9 N., R.5 E., Bartholomew County, Hydrologic Unit 05120205, on left bank at abutment of abandoned bridge at west end of Second Street in Columbus, 0.6 mile downstream from confluence of Driftwood River and Flatrock River, 1.3 miles upstream from Haw Creek, and at mile 238.7.

DRAINAGE AREA.--1,707 mi^2.

PERIOD OF RECORD.--October 1947 to current year. Prior to January 1948 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1948-49. WSP 2109: Drainage area.

GAGE.--Water-stage recorder above concrete control. Datum of gage is 603.12 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 22, 1952, nonrecording gage 600 ft upstream at same datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--37 years, 1,835 ft^3/s, 14.60 in/yr.

EXTREMES FOR PERIOD OF RECORD.---Maximum discharge, 52,300 ft^3/s Mar. 6, 1963, gage height, 16.23 ft; minimum daily, 87 ft^3/s Sept. 29, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 10,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 24	1100	*17300	*8.73

Minimum daily discharge, 147 ft^3/s Oct. 2,3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	148	416	3290	1110	850	1690	2690	2690	1590	544	502	295
2	147	407	2450	1030	865	1570	2390	2350	1470	544	463	275
3	147	389	2110	1030	2170	1520	2230	2170	1390	523	444	295
4	158	398	2350	998	5160	1450	2980	2290	1280	664	472	275
5	192	398	4060	998	3760	1690	8390	2290	1180	980	544	275
6	239	389	4280	998	2200	3170	7490	2290	1110	1790	704	288
7	250	381	4060	1010	1520	3720	5540	2840	1030	1840	612	282
8	233	364	3520	963	1220	3210	4190	2660	963	1300	513	269
9	212	355	2800	913	1140	2590	3320	2350	897	998	612	250
10	197	416	2350	897	1200	2140	2840	2110	850	834	638	250
11	188	1160	2760	850	3800	1890	2420	1890	789	718	612	250
12	188	3640	6910	774	5540	1710	2170	1790	746	651	500	262
13	228	3250	9620	789	5100	1590	2200	1710	704	600	566	250
14	239	2290	9380	774	4960	1710	2290	1690	732	555	492	244
15	275	1760	7070	732	3930	1970	2200	1540	834	523	463	250
16	282	1840	5270	704	3100	5400	2200	1430	760	502	434	282
17	250	2390	3880	690	2690	8620	3440	1340	690	472	398	288
18	239	2200	3020	677	2420	9270	4230	1280	690	453	389	269
19	223	1790	2420	566	2320	6240	4010	1220	732	425	389	250
20	364	1540	2060	566	2170	5990	3400	1180	704	416	389	239
21	664	1450	1950	520	1920	8520	3640	1890	638	425	355	233
22	774	1390	2110	560	1710	8690	9230	3210	651	407	355	228
23	930	1950	2060	570	1540	7010	16100	4560	612	398	339	275
24	1120	4280	1550	651	1450	5720	17000	5230	930	372	331	288
25	946	4930	1100	1200	1640	5200	12700	3880	1030	364	324	339
26	774	3680	1150	1500	2110	4900	6790	2950	804	425	302	425
27	651	2840	1200	1640	2420	4700	5160	2390	704	557	295	664
28	566	4870	1250	1760	2350	4330	4230	2140	664	930	295	651
29	513	5670	1200	1450	2000	4510	3480	2030	638	760	295	534
30	463	4830	1150	1120	---	3880	3060	1890	577	746	355	453
31	434	---	1150	881	---	3170	---	1760	---	566	331	---
TOTAL	12234	61663	99530	28921	73255	127770	152010	71040	26389	21282	13813	9428
MEAN	395	2055	3211	933	2526	4122	5067	2292	880	687	446	314
MAX	1120	5670	9620	1760	5540	9270	17000	5230	1590	1840	704	664
MIN	147	355	1100	520	850	1450	2170	1180	577	364	295	228
CFSM	.23	1.20	1.88	.55	1.48	2.42	2.97	1.34	.52	.40	.26	.18
IN.	.27	1.34	2.17	.63	1.60	2.78	3.31	1.55	.58	.46	.30	.21

CAL YR 1983 TOTAL 548479 MEAN 1503 MAX 19700 MIN 140 CFSM .88 IN 11.95
WTR YR 1984 TOTAL 697335 MEAN 1905 MAX 17000 MIN 147 CFSM 1.12 IN 15.20

03364200 HAW CREEK NEAR CLIFFORD, IN

LOCATION.--Lat 39°16'04", long 85°51'22", in NW¼SW¼ sec.34, T.10 N., R.6 E., Bartholomew County, Hydrologic Unit 05120205, on left bank 20 ft downstream from bridge on County Road 450 North, 1.2 miles southeast of Clifford, 5.8 miles northeast of Columbus, and 7.6 miles upstream from mouth.

DRAINAGE AREA.--47.5 mi².

PERIOD OF RECORD.--August 1967 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 643.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--17 years, 49.8 ft³/s, 14.24 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,560 ft³/s May 24, 1968, gage height, 13.9 ft, from floodmark; no flow at times during September and October 1967 due to diversion for irrigation.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1200 ft³/s and maximum (*).

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 5	0600	*1830	*11.98	Apr. 22	1200	1750	11.73

Minimum daily discharge, 0.80 ft³/s Oct. 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	6.6	76	17	15	53	56	60	23	9.0	4.1	1.8
2	.80	6.0	72	17	22	52	48	51	21	8.6	4.1	1.8
3	.80	6.0	64	19	91	54	47	53	19	8.3	4.1	1.9
4	.98	5.7	138	18	55	54	299	80	17	77	4.1	2.5
5	1.7	5.4	114	18	30	174	1100	73	16	73	3.9	2.2
6	1.9	5.1	98	20	22	195	229	78	16	52	3.7	2.1
7	1.4	4.6	77	19	17	124	144	78	15	24	3.5	1.8
8	1.1	4.6	65	19	15	100	117	67	14	16	3.5	1.5
9	.95	4.6	57	17	15	70	105	60	13	13	3.3	1.4
10	.90	12	50	18	33	68	96	53	13	12	3.3	1.4
11	.90	117	200	16	84	63	77	46	12	10	3.3	1.3
12	.90	70	536	15	62	54	72	45	12	9.4	3.1	1.2
13	3.0	38	188	15	105	59	93	42	12	9.0	2.9	1.2
14	3.8	26	148	14	88	95	83	42	11	7.9	2.9	1.1
15	2.3	36	127	12	66	107	74	37	11	7.6	3.1	1.1
16	1.7	84	93	12	60	211	86	32	11	7.2	2.9	1.1
17	1.5	66	71	11	61	124	133	29	11	6.9	2.7	1.0
18	1.4	45	60	8.6	58	95	112	27	11	6.3	2.7	1.0
19	1.4	32	51	8.0	58	78	93	25	11	6.0	2.7	1.0
20	35	31	44	7.5	47	247	79	23	11	5.4	2.5	1.0
21	83	38	46	7.0	40	191	242	52	11	5.1	2.4	1.0
22	65	30	93	7.0	36	172	1030	39	12	5.1	2.4	.90
23	102	211	50	9.2	33	122	319	93	20	4.6	2.4	1.3
24	49	236	40	22	37	94	204	64	51	4.4	2.9	2.7
25	28	125	35	92	89	90	137	46	22	4.4	2.7	3.1
26	18	85	31	57	98	85	105	37	14	4.6	2.4	5.7
27	12	135	28	48	72	73	95	31	12	6.3	2.4	3.9
28	10	407	26	21	64	105	87	31	11	4.9	2.1	3.1
29	8.6	149	23	17	51	131	83	33	9.8	4.9	2.1	2.7
30	7.6	104	20	16	---	84	76	28	9.4	4.6	1.9	2.4
31	6.9	---	17	15	---	65	---	25	---	4.4	1.9	---
TOTAL	453.33	2125.6	2738	611.3	1524	3289	5521	1480	452.2	421.9	92.0	56.20
MEAN	14.6	70.9	88.3	19.7	52.6	106	184	47.7	15.1	13.6	2.97	1.87
MAX	102	407	536	92	105	247	1100	93	51	77	4.1	5.7
MIN	.80	4.6	17	7.0	15	52	47	23	9.4	4.4	1.9	.90
CFSM	.31	1.49	1.86	.42	1.11	2.23	3.87	1.00	.32	.29	.06	.04
IN.	.36	1.66	2.14	.48	1.19	2.58	4.32	1.16	.35	.33	.07	.04

CAL YR 1983 TOTAL 17687.54 MEAN 48.5 MAX 1220 MIN .80 CFSM 1.02 IN 13.85
WTR YR 1984 TOTAL 18764.53 MEAN 51.3 MAX 1100 MIN .80 CFSM 1.08 IN 14.70

03364500 CLIFTY CREEK AT HARTSVILLE, IN

LOCATION.--Lat 39°16'25", long 85°42'10", in NW¼NW¼ sec.36, T.10 N., R.7 E., Bartholomew County, Hydrologic Unit 05120206, at downstream side of left abutment of county highway bridge, 0.2 mile north of Hartsville, 5.9 miles upstream from Duck Creek, and at mile 20.0.

DRAINAGE AREA.--91.4 mi².

PERIOD OF RECORD.--February 1948 to current year.

REVISED RECORDS.--WSP 1335: 1950. WSP 1725: 1949(M). WSP 2109: Drainage area. WDR IN-74-1: 1973.

GAGE.--Water-stage recorder. Datum of gage is 677.34 ft National Geodetic Vertical Datum of 1929. Prior to Sept. 24, 1952, nonrecording gage at same site and datum.

REMARKS.--Records good except those for the winter periods, which are poor.

AVERAGE DISCHARGE.--36 years, 96.2 ft³/s, 14.29 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft³/s Jan. 21, 1959, gage height, 14.29 ft; no flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1913 reached an elevation of 702.4 ft National Geodetic Vertical Datum of 1929, from floodmarks, upstream from bridge.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,300 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 12	0500	1680	5.38	Apr. 5	1000	*2360	*6.47
Mar. 16	1100	1350	4.82	Apr. 22	1500	1730	5.47

No flow Oct. 1-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	4.2	135	32	18	54	92	78	44	8.7	7.0	1.6
2	.00	5.0	108	33	40	55	76	63	41	8.3	5.9	1.2
3	.00	5.0	103	33	300	50	72	72	38	8.0	4.7	2.5
4	.00	4.7	243	31	223	49	271	145	34	163	12	2.6
5	.00	3.8	257	32	67	210	1870	129	32	334	5.9	2.0
6	.00	3.5	208	35	44	377	605	153	29	184	5.0	1.9
7	.00	3.9	155	40	22	235	318	180	26	94	5.9	2.0
8	.00	4.2	123	36	20	174	210	139	23	40	3.9	1.5
9	.00	4.4	101	30	22	112	159	116	21	24	10	1.3
10	.00	6.3	88	33	26	97	124	85	20	17	10	1.9
11	.00	271	359	25	116	77	97	70	19	13	76	1.9
12	.00	163	1360	24	111	57	80	64	18	11	71	1.5
13	.00	79	548	22	145	70	96	57	18	8.7	18	1.4
14	.11	49	366	20	154	129	90	60	24	7.4	9.6	.96
15	.22	51	311	18	105	182	80	49	20	6.6	5.9	.70
16	.20	197	201	18	84	947	132	42	18	6.6	3.4	.63
17	.18	156	139	18	77	419	374	38	147	6.3	1.5	.56
18	.25	99	107	15	71	279	296	35	53	5.0	2.0	.46
19	.22	68	83	13	73	207	215	35	31	4.2	1.5	.39
20	18	61	70	11	60	531	160	35	21	3.7	1.5	.33
21	46	70	78	9.0	48	545	335	161	17	3.9	1.6	.25
22	69	62	135	11	41	404	1370	120	14	3.4	1.6	.20
23	154	281	95	12	36	351	822	438	177	2.8	1.6	2.3
24	82	613	80	40	36	251	499	248	116	2.3	1.1	4.7
25	37	297	60	218	68	206	312	148	50	2.3	.87	6.6
26	19	184	64	110	139	179	214	106	22	8.7	.56	60
27	12	217	68	123	136	151	157	77	16	147	.50	51
28	7.8	643	72	51	108	160	122	72	14	51	.96	20
29	6.6	339	50	30	68	247	96	70	11	40	.96	12
30	5.9	197	35	22	---	162	100	56	9.3	19	.87	9.1
31	4.7	---	31	17	---	115	---	49	---	10	1.6	---
TOTAL	463.18	4142.0	5833	1162.0	2458	7082	9444	3190	1123.3	1243.9	272.92	193.48
MEAN	14.9	138	188	37.5	84.8	228	315	103	37.4	40.1	8.80	6.45
MAX	154	643	1360	218	300	947	1870	438	177	334	76	60
MIN	.00	3.5	31	9.0	18	49	72	35	9.3	2.3	.50	.20
CFSM	.16	1.51	2.06	.41	.93	2.50	3.45	1.13	.41	.44	.10	.07
IN.	.19	1.69	2.37	.47	1.00	2.88	3.84	1.30	.46	.51	.11	.08

CAL YR 1983 TOTAL 32884.26 MEAN 90.1 MAX 2630 MIN .00 CFSM .99 IN 13.38
WTR YR 1984 TOTAL 36607.78 MEAN 100 MAX 1870 MIN .00 CFSM 1.09 IN 14.90

03365000 SAND CREEK NEAR BREWERSVILLE, IN

LOCATION.--Lat 39°05'03", long 85°39'32", in NW¼NE¼ sec.5, T.7 N., R.8 E., Jennings County, Hydrologic Unit 05120206, on left bank at downstream side of county highway bridge, 2.5 miles west of Brewersville, 5.7 miles upstream from Wyaloosing Creek, and 16.0 miles upstream from mouth.

DRAINAGE AREA.--155 mi^2.

PERIOD OF RECORD.--February 1948 to current year.

REVISED RECORDS.--WSP 1335: 1949. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 629.13 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 6, 1952, nonrecording gage at site 1.7 miles upstream at datum approximately 8 ft higher.

REMARKS.--Records good except those for the winter periods, which are poor.

AVERAGE DISCHARGE.--36 years, 172 ft^3/s, 15.07 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,900 ft^3/s Jan. 21, 1959, gage height, 21.70 ft inside, 22.20 ft outside, from rating curve extended above 6,500 ft^3/s on basis of contracted-opening measurement of peak flow; no flow at times during 1948, 1949, 1953-55, 1964, 1965, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,900 ft /s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 23	1800	3050	9.21	Apr. 5	0300	*4370	*10.93
Dec. 12	0300	3940	10.30	Apr. 22	0800	3980	10.37

Minimum daily discharge, 0.46 ft^3/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	21	151	54	60	123	176	160	72	13	33	6.4
2	.88	22	127	56	70	129	151	127	62	12	24	4.9
3	.46	24	170	58	500	138	164	489	54	11	48	6.8
4	.96	26	583	59	289	135	768	856	46	205	405	16
5	12	24	337	66	131	985	3490	381	41	890	83	14
6	13	21	249	66	89	883	917	372	38	304	29	10
7	14	19	188	70	50	408	435	304	34	153	21	7.2
8	5.1	17	143	65	45	286	291	355	30	76	17	6.8
9	2.8	16	124	60	50	194	231	252	28	51	17	6.4
10	1.5	18	111	65	70	178	198	186	25	39	13	6.0
11	1.2	217	712	50	500	160	164	153	22	33	11	5.6
12	2.5	211	2670	51	142	131	142	147	21	28	10	5.6
13	12	119	775	45	249	269	247	142	22	24	19	6.4
14	34	87	466	42	245	489	190	140	22	19	13	5.6
15	23	102	408	39	50	402	153	113	22	17	9.0	4.9
16	12	306	252	37	45	1510	211	96	21	16	7.2	3.5
17	6.3	231	182	37	50	566	722	86	39	14	6.8	3.8
18	20	151	147	30	124	369	435	78	92	13	7.6	3.5
19	15	115	100	28	133	281	309	72	48	11	6.0	3.8
20	351	129	90	25	124	1340	235	67	38	11	6.8	3.2
21	708	192	108	23	100	853	951	70	29	10	6.4	2.7
22	940	122	220	23	89	614	2860	110	23	10	6.8	2.4
23	527	1290	140	25	80	463	1170	633	129	10	6.8	23
24	170	912	100	50	78	320	815	271	184	9.0	6.0	68
25	104	325	90	150	158	281	435	155	53	8.5	6.0	190
26	73	200	80	100	247	266	299	166	33	99	6.8	414
27	55	256	75	200	192	233	235	111	24	102	5.2	87
28	43	1030	74	100	174	585	215	105	20	43	46	38
29	34	366	72	80	145	643	164	164	20	82	18	23
30	28	206	63	60	---	299	238	105	16	51	13	17
31	24	---	55	50	---	215	---	84	---	25	10	---
TOTAL	3234.90	6775	9062	1864	4279	13748	17011	6550	1308	2389.5	917.4	995.5
MEAN	104	226	292	60.1	148	443	567	211	43.6	77.1	29.6	33.2
MAX	940	1290	2670	200	500	1510	3490	856	184	890	405	414
MIN	.46	16	55	23	45	123	142	67	16	8.5	5.2	2.4
CFSM	.67	1.46	1.88	.39	.96	2.86	3.66	1.36	.28	.50	.19	.21
IN.	.78	1.63	2.17	.45	1.03	3.30	4.08	1.57	.31	.57	.22	.24

CAL YR 1983 TOTAL 57064.02 MEAN 156 MAX 3970 MIN .44 CFSM 1.01 IN 13.70
WTR YR 1984 TOTAL 68134.30 MEAN 186 MAX 3490 MIN .46 CFSM 1.20 IN 16.35

03365500 EAST FORK WHITE RIVER AT SEYMOUR, IN

LOCATION.--Lat 38°58'57", long 85°53'57", in NW¼NE¼ sec.7, T.6 N., R.6 E., Jackson County, Hydrologic Unit 05120206, on left bank 1,700 ft downstream from highway bridge, 1 mile north of Seymour, 9.5 miles downstream from Sand Creek, and at mile 214.6.

DRAINAGE AREA.--2,341 mi².

PERIOD OF RECORD.--October 1927 to current year. Yearly maximum discharge only for water years 1924-27 published in WSP 1305. Daily gage heights from May 1923 to September 1927 are available in the district office.

REVISED RECORDS.--WSP 743: 1928-29, 1931-32. WSP 783: 1934. WSP 873: 1938. WSP 1335: 1928(M), 1929-30, 1932-33(M), 1937(M), 1942. WSP 1435: 1949. WSP 1705: 1958. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 550.67 ft National Geodetic Vertical Datum of 1929. Oct. 1, 1927 to July 2, 1931, nonrecording gage 1,700 ft upstream at datum 7.61 ft higher. July 3, 1931 to July 16, 1934, nonrecording gage at site 100 ft downstream at present datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--57 years, 2,446 ft³/s, 14.19 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 78,500 ft³/s Jan. 5, 1949, gage height, 19.67 ft; minimum daily, 86 ft³/s Sept. 28, 30, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 21.0 ft, from information by Corps of Engineers and Indiana Department of Highways, discharge, 120,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 12,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 13	1300	13800	14.36	Apr. 6	0400	20900	15.79
Mar. 22	1200	12400	13.93	Apr. 24	1000	*23800	*16.22

Minimum daily discharge, 181 ft³/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	189	576	5070	1430	1070	2320	3930	4280	1970	911	667	399
2	185	550	3620	1410	1020	2080	3430	3700	1840	886	629	380
3	181	530	3100	1410	1520	2040	3100	3400	1730	868	600	376
4	187	505	3580	1350	4450	1980	3390	4910	1630	1330	995	387
5	215	501	4640	1320	5220	2600	11400	4600	1550	2280	829	362
6	208	489	5210	1330	3360	6060	17900	3890	1480	2680	736	366
7	239	477	4900	1410	2160	5500	10800	4250	1420	2520	740	362
8	262	461	4350	1370	1640	4800	7710	4320	1360	1950	663	355
9	249	449	3720	1260	1480	3870	5620	3990	1300	1510	609	345
10	238	481	3140	1230	1420	3110	4650	3430	1260	1240	693	341
11	229	766	3000	1180	2120	2700	3890	3030	1210	1080	727	327
12	225	2570	8790	1090	5250	2360	3380	2770	1170	967	654	321
13	263	3530	13600	1050	6040	2170	3380	2610	1140	883	680	324
14	264	2880	13000	1030	6050	2900	3430	2540	1120	824	634	317
15	279	2240	12000	986	5440	3000	3230	2390	1150	771	580	307
16	304	2290	9320	948	4300	5620	3060	2160	1190	736	550	307
17	304	2770	6370	920	3590	9200	4300	2020	1130	701	521	331
18	306	2820	4380	902	3220	10700	5700	1910	1160	680	509	324
19	294	2380	3530	750	3000	10700	5710	1840	1160	654	489	310
20	376	2020	2920	740	2870	8670	5030	1770	1140	634	489	300
21	1990	1980	2660	670	2560	11900	4940	1780	1090	629	481	297
22	1940	1860	2760	700	2240	12400	12200	3000	1040	617	461	290
23	3390	2360	2890	758	2010	11400	21600	5180	1020	605	473	317
24	1900	7120	1950	852	1870	9440	23500	6870	1770	584	437	391
25	1540	6840	1450	1900	2030	7620	20900	5850	1590	571	429	473
26	1230	5440	1500	2000	2640	6610	13600	4390	1340	621	418	1160
27	1000	3920	1600	1950	3090	6110	8670	3410	1140	1010	403	803
28	856	7030	1700	2000	3110	5920	6530	2830	1060	934	403	869
29	749	8570	1650	1840	2790	7350	5420	2690	1010	953	426	751
30	671	7460	1550	1490	---	6050	4790	2420	961	929	406	654
31	617	---	1450	1210	---	4820	---	2160	---	784	422	---
TOTAL	20880	81865	139400	38486	87560	182000	235190	104390	39131	32342	17753	12846
MEAN	674	2729	4497	1241	3019	5871	7840	3367	1304	1043	573	428
MAX	3390	8570	13600	2000	6050	12400	23500	6870	1970	2680	995	1160
MIN	181	449	1450	670	1020	1980	3060	1770	961	571	403	290
CFSM	.29	1.17	1.92	.53	1.29	2.51	3.35	1.44	.56	.45	.25	.18
IN.	.33	1.30	2.22	.61	1.39	2.89	3.74	1.66	.62	.51	.28	.20

CAL YR 1983 TOTAL 851473 MEAN 2333 MAX 36700 MIN 181 CFSM 1.00 IN 13.53
WTR YR 1984 TOTAL 991843 MEAN 2710 MAX 23500 MIN 181 CFSM 1.16 IN 15.76

03366200 HARBERTS CREEK NEAR MADISON, IN

LOCATION.--Lat 38°46'55", long 85°29'08", in SW¼SE¼ sec.14, T.4 N., R.9 E., Jefferson County, Hydrologic Unit 05120207, attached to left downstream wingwall of bridge on County Road 533 West, 0.2 mile west of Smyrna, 3.7 miles upstream from Big Creek, and 4 miles northwest of Madison.

DRAINAGE AREA.--9.31 mi².

PERIOD OF RECORD.--August 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 725.75 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods and those below 1.0 ft³/s, which are poor.

AVERAGE DISCHARGE.--16 years, 13.3 ft³/s, 19.40 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,540 ft³/s Apr. 2, 1970, gage height, 7.89 ft; no flow at times many years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 21	0900	509	5.42	Apr. 22	0400	710	6.00
Oct. 22	1800	*820	*6.28	May 4	0900	548	5.54

Minimum daily discharge, no flow Oct. 1-4, Aug. 27, Sept. 20-22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.96	8.3	4.0	6.8	9.4	8.5	5.2	3.6	.03	.52	.04
2	.00	2.1	6.7	3.5	12	15	6.9	4.0	2.5	.03	.56	.03
3	.00	4.7	8.3	5.0	65	24	13	68	1.7	.02	.46	.77
4	.00	2.3	57	4.0	22	28	33	205	1.3	18	2.9	.41
5	2.6	1.7	20	10	13	146	139	34	1.1	10	1.6	.09
6	.51	1.3	20	8.0	8.7	16	31	39	.96	29	.62	.05
7	.12	1.1	12	6.5	6.3	16	14	32	.84	7.7	.36	.04
8	.07	.90	8.3	5.1	4.7	12	9.7	53	.77	2.6	.27	.02
9	.18	.79	6.5	3.7	3.3	9.4	9.3	19	.64	1.6	.19	.02
10	.05	2.0	5.3	4.4	5.8	7.4	10	11	.57	1.1	.16	.02
11	.03	9.6	149	4.0	17	6.7	7.8	8.4	.53	.77	.13	.03
12	.03	6.2	114	2.9	17	5.4	6.5	6.6	.52	.89	.13	.02
13	13	3.5	28	2.5	62	50	17	5.7	.42	.59	.09	.01
14	2.1	2.6	22	2.0	33	28	10	5.4	.63	.40	.06	.38
15	.54	14	17	1.5	15	15	8.4	3.7	.46	.52	.07	.21
16	.21	20	9.8	1.5	11	155	39	2.7	.40	.74	.04	.07
17	.12	13	6.8	1.7	9.8	28	57	2.1	.30	.38	.03	.03
18	4.2	7.8	5.3	1.2	8.4	17	26	1.8	.28	.26	.03	.02
19	1.2	6.4	4.5	1.1	8.9	15	15	1.6	.72	.20	.03	.01
20	144	42	3.5	1.1	7.2	130	11	1.6	.39	.16	.04	.00
21	286	22	4.6	1.0	5.8	58	200	1.6	.27	.18	.03	.00
22	311	9.8	31	1.0	5.0	37	348	1.8	.21	.14	.13	.00
23	76	180	12	2.0	4.2	19	98	13	.34	.09	.87	1.9
24	19	57	6.1	40	4.1	13	52	5.4	.95	.07	.09	6.6
25	11	18	4.0	22	15	27	22	3.5	.48	.05	.03	.85
26	7.1	10	3.0	17	13	25	13	34	.20	1.8	.02	2.0
27	4.8	80	4.0	12	8.6	22	9.7	8.7	.15	1.8	.00	.18
28	3.0	129	5.0	6.6	9.2	124	7.9	29	.11	19	14	.05
29	2.1	24	6.0	4.7	9.2	52	6.5	18	.07	6.6	1.5	.03
30	1.6	12	3.5	3.5	---	17	6.5	7.8	.04	1.3	.30	.02
31	1.2	---	3.0	3.0	---	11	---	5.3	---	.71	.08	---
TOTAL	891.76	684.75	594.5	186.5	411.0	1138.3	1235.7	637.9	21.45	106.73	25.34	13.90
MEAN	28.8	22.8	19.2	6.02	14.2	36.7	41.2	20.6	.72	3.44	.82	.46
MAX	311	180	149	40	65	155	348	205	3.6	29	14	6.6
MIN	.00	.79	3.0	1.0	3.3	5.4	6.5	1.6	.04	.02	.00	.00
CFSM	3.09	2.45	2.06	.65	1.53	3.94	4.43	2.21	.08	.37	.09	.05
IN.	3.56	2.74	2.38	.75	1.64	4.55	4.94	2.55	.09	.43	.10	.06

CAL YR 1983 TOTAL 6521.00 MEAN 17.9 MAX 487 MIN .00 CFSM 1.92 IN 26.05
WTR YR 1984 TOTAL 5947.83 MEAN 16.3 MAX 348 MIN .00 CFSM 1.75 IN 23.76

03366500 MUSCATATUCK RIVER NEAR DEPUTY, IN

LOCATION.--Lat 38°48'15", long 85°40'26", in SW¼NE¼ sec.7, T.4 N., R.8 E., Jefferson County, Hydrologic Unit 05120207, on left bank at downstream side of highway bridge, 1.4 miles northwest of Deputy, 1.9 miles upstream from Coffee Creek, 2.4 miles downstream from confluence of Graham Creek and Big Creek, and at mile 50.0.

DRAINAGE AREA.--293 mi².

PERIOD OF RECORD.--November 1947 to current year.

REVISED RECORDS.--WSP 1335: 1948. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 540.00 ft National Geodetic Vertical Datum of 1929. Prior to June 22, 1955, nonrecording gage at same site. Prior to Aug. 25, 1983 at datum 1.17 ft higher.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--36 years (water years 1949 to current year), 350 ft³/s, 16.22 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 52,200 ft³/s Jan. 21, 1959, from rating curve extended above 25,000 ft³/s on basis of contracted-opening measurement of peak flow, gage height, 34.3 ft, present datum, from floodmarks; no flow at times many years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 7,500 ft³/s and maximum (*).

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 21	1500	10,200	21.81	Dec. 12	0800	7630	20.12
Oct. 23	0100	9860	21.58	Apr. 22	0900	*11,400	*22.44

Minimum daily discharge, 0.58 ft³/s Oct. 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.58	79	389	70	150	248	421	265	86	5.8	25	34
2	.58	69	298	90	300	264	347	237	72	4.3	26	21
3	.58	68	289	110	843	494	322	454	60	3.9	20	17
4	1.5	70	1020	100	981	508	577	3090	50	66	27	16
5	7.4	63	1000	130	491	1730	3070	1460	43	644	49	12
6	4.5	60	616	200	332	1810	1550	801	38	1090	61	11
7	2.5	56	502	170	200	763	697	718	34	505	44	7.5
8	2.5	51	350	140	150	553	495	845	30	168	30	5.4
9	3.0	45	277	110	120	426	417	687	26	105	21	4.3
10	4.0	47	239	135	162	342	402	404	23	77	40	4.7
11	3.0	109	720	120	222	312	354	282	21	60	32	5.4
12	2.0	160	5620	100	444	284	306	218	16	53	20	4.7
13	45	159	1480	88	649	498	444	183	13	34	13	5.1
14	30	122	765	76	908	935	465	178	14	28	10	6.6
15	24	174	660	66	529	648	357	148	14	23	12	12
16	19	567	476	62	361	2320	424	123	12	19	8.5	5.8
17	15	574	327	60	304	1160	1090	115	9.0	16	6.2	3.9
18	61	390	260	56	277	678	808	113	8.5	41	4.7	3.1
19	68	279	200	52	264	575	610	105	11	13	3.9	2.8
20	730	376	150	48	260	1750	442	95	9.0	11	3.3	2.6
21	8170	772	229	45	225	1990	2150	86	9.0	10	2.9	2.9
22	5050	470	462	45	194	974	9020	80	9.0	8.5	3.3	4.1
23	5580	1940	420	50	174	702	2250	112	8.5	7.5	9.5	12
24	982	2690	220	200	163	518	1660	110	21	6.2	4.5	37
25	525	871	130	700	214	484	872	84	72	5.8	3.3	126
26	310	497	110	400	397	595	623	369	47	6.2	2.9	142
27	206	540	120	500	344	514	486	334	27	12	2.9	177
28	154	3660	130	330	284	1100	396	176	16	12	135	76
29	123	1260	150	200	267	2340	330	230	11	41	174	49
30	103	588	120	150	---	808	298	141	7.5	62	67	34
31	90	---	90	110	---	547	---	100	---	37	50	---
TOTAL	22317.14	16806	17819	4713	10209	26870	31683	12343	817.5	3175.2	911.9	844.9
MEAN	720	560	575	152	352	867	1056	398	27.3	102	29.4	28.2
MAX	8170	3660	5620	700	981	2340	9020	3090	86	1090	174	177
MIN	.58	45	90	45	120	248	298	80	7.5	3.9	2.9	2.6
CFSM	2.46	1.91	1.96	.52	1.20	2.96	3.60	1.36	.09	.35	.10	.10
IN.	2.83	2.13	2.26	.60	1.30	3.41	4.02	1.57	.10	.40	.12	.11

CAL YR 1983 TOTAL 173688.64 MEAN 476 MAX 13300 MIN .57 CFSM 1.63 IN 22.05
WTR YR 1984 TOTAL 148509.64 MEAN 406 MAX 9020 MIN .58 CFSM 1.39 IN 18.86

BEST COPY AVAILABLE

03368000 BRUSH CREEK NEAR NEBRASKA, IN

LOCATION.--Lat 39°04'13", long 85°29'10" in NW¼NE¼ sec.11, T.7 N., R.9 E., Jennings County, Hydrologic Unit 05120207, on right bank at downstream side of county road bridge, 1.5 miles northwest of Nebraska, 2.9 miles northeast of Butlerville, and 3.6 miles upstream from Brush Creek Dam.

DRAINAGE AREA.--11.4 mi².

PERIOD OF RECORD.--May 1955 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 717.17 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records fair.

AVERAGE DISCHARGE.--29 years, 13.2 ft³/s, 15.72 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,360 ft³/s June 10, 1981, gage height, 12.99 ft, from rating curve extended above 550 ft³/s on basis of slope-area measurement of peak flow and a contracted-opening measurement at gage height, 10.20 ft; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 950 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 23	1145	961	6.95	Apr. 22	0315	*1030	*7.15
Apr. 4	2000	989	7.03				

Minimum daily discharge, no flow Oct. 1-12, August 20, 21, 26, 27, Sept. 19-22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	1.7	7.1	1.9	3.5	7.6	8.5	10	2.3	.23	.56	.03
2	.00	1.4	7.4	2.0	10	9.0	7.4	8.3	2.1	.23	.83	.01
3	.00	1.6	16	2.5	40	12	14	104	1.7	.14	.64	5.2
4	.00	1.7	84	2.3	12	10	164	113	1.4	16	6.6	2.1
5	.00	1.5	20	2.8	8.4	142	189	27	1.2	24	1.4	.72
6	.00	1.5	18	3.3	5.5	36	27	29	1.1	5.1	.89	.52
7	.00	1.4	14	4.0	4.0	17	15	19	.95	2.3	.68	.34
8	.00	1.4	10	3.3	3.0	13	11	33	.87	1.2	1.3	.19
9	.00	1.3	7.5	2.5	3.7	9.6	9.9	14	.80	.87	1.1	.14
10	.00	2.5	6.6	3.0	4.9	9.3	9.3	11	.80	.73	.62	.20
11	.00	12	213	2.5	9.1	8.4	8.0	8.5	.73	.52	.96	.20
12	.00	4.6	139	2.2	11	7.1	9.5	8.0	.66	.46	.63	.12
13	3.8	2.7	25	2.0	17	54	23	8.7	.66	.34	.40	.05
14	1.9	2.2	22	1.9	12	36	10	8.2	2.3	.29	.26	.07
15	.80	23	17	1.8	8.9	28	8.8	6.0	.80	.23	.19	.20
16	.52	21	9.4	1.8	7.9	133	29	4.8	.59	.23	.13	.12
17	.34	12	7.3	1.7	7.8	22	43	4.0	.52	.10	.08	.05
18	22	7.6	6.0	1.5	7.4	16	21	3.4	.46	.07	.05	.02
19	3.4	5.9	4.5	1.3	8.5	12	14	3.0	.46	.03	.02	.00
20	163	30	4.0	1.1	6.6	119	11	2.7	.52	.03	.00	.00
21	96	14	4.8	1.0	5.5	39	175	2.7	.52	.03	.00	.00
22	245	7.7	22	1.0	4.8	36	289	2.6	.34	.03	.02	.00
23	34	244	6.8	1.2	4.5	17	67	14	14	.03	.21	2.8
24	12	34	3.5	30	4.7	12	39	3.9	2.6	.02	.17	22
25	7.2	13	2.5	18	19	18	19	2.8	.95	.02	.03	37
26	5.1	8.8	2.5	10	14	15	13	16	.66	5.7	.00	33
27	4.2	78	2.7	20	9.2	13	14	4.8	.59	2.6	.00	3.6
28	3.5	72	3.1	6.4	8.8	90	18	4.9	.52	19	7.8	2.2
29	2.5	15	2.8	5.0	8.0	31	11	4.8	.40	3.4	.66	1.6
30	2.2	9.5	2.2	3.8	---	14	22	3.2	.34	.98	.23	1.3
31	1.8	---	1.8	3.0	---	9.9	---	2.6	---	.68	.07	---
TOTAL	609.26	633.0	692.5	144.8	269.7	995.9	1299.4	487.9	41.84	85.59	26.53	113.78
MEAN	19.7	21.1	22.3	4.67	9.30	32.1	43.3	15.7	1.39	2.76	.86	3.79
MAX	245	244	213	30	40	142	289	113	14	24	7.8	37
MIN	.00	1.3	1.8	1.0	3.0	7.1	7.4	2.6	.34	.02	.00	.00
CFSM	1.73	1.85	1.96	.41	.82	2.82	3.80	1.38	.12	.24	.08	.33
IN.	1.99	2.07	2.26	.47	.88	3.25	4.24	1.59	.14	.28	.09	.37

CAL YR 1983 TOTAL 5571.87 MEAN 15.3 MAX 424 MIN .00 CFSM 1.34 IN 18.18
WTR YR 1984 TOTAL 5400.20 MEAN 14.8 MAX 289 MIN .00 CFSM 1.30 IN 17.62

03369000 VERNON FORK MUSCATATUCK RIVER NEAR BUTLERVILLE, IN

LOCATION.--Lat 39°02'55", long 85°32'40", in NW¼SE¼ sec.17, T.7 N., R.9 E., Jennings County, Hydrologic Unit 05120207, on left bank 0.3 mile downstream from Muscatatuck State School dam, 1.1 miles downstream from Brush Creek, 2 miles northwest of Butlerville, and at mile 50.6.

DRAINAGE AREA.--85.9 mi².

PERIOD OF RECORD.--February 1942 to current year. Prior to October 1960, published as North Fork of Vernon Fork near Butlerville, and as Vernon Fork near Butlerville, October 1960 to September 1979.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 669.40 ft National Geodetic Vertical Datum of 1929. Prior to Aug. 19, 1942, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Water supply for the Muscatatuck State School is diverted and the sewage effluent returned above station. Flow regulated by Brush Creek Reservoir.

AVERAGE DISCHARGE.--42 years, 94.0 ft³/s, 14.86 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,200 ft³/s Jan. 21, 1959, gage height, 25.41 ft, from rating curve extended above 10,000 ft³/s on basis of slope-area measurement at gage height 25.41 ft; no flow at times during 1944, 1945, 1949, and 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 23	1600	*3610	*10.32

Minimum daily discharge, 0.51 ft³/s Oct. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.95	9.5	50	17	22	45	69	82	23	2.2	3.7	1.6
2	.97	9.3	43	19	33	48	56	59	19	2.2	3.2	1.3
3	1.0	9.8	78	20	195	54	66	308	16	2.0	3.2	3.1
4	.79	12	467	20	119	55	542	559	14	59	14	9.0
5	.76	11	186	23	54	701	1770	211	11	515	6.2	3.1
6	.54	9.0	143	27	33	425	314	213	10	112	4.4	1.8
7	.55	8.8	97	30	25	164	140	149	9.0	68	3.2	1.5
8	.51	8.0	66	28	23	118	88	197	9.0	28	2.6	1.3
9	.60	7.6	53	26	22	74	78	123	8.0	18	3.1	1.3
10	.73	9.0	47	29	24	65	71	83	7.1	13	2.6	1.7
11	.82	112	847	23	36	60	58	64	6.2	11	1.8	1.7
12	.95	72	1660	20	63	50	52	59	5.8	8.5	.84	1.6
13	1.7	42	276	18	[illegible]	200	152	56	6.0	6.7	1.6	1.4
14	5.6	32	186	18	[illegible]	279	89	56	9.5	5.2	2.4	1.3
15	3.9	75	141	17	57	286	66	43	7.6	5.2	2.1	1.3
16	2.1	164	72	17	49	914	196	37	6.0	3.9	1.7	1.2
17	1.4	112	52	17	47	208	357	33	5.4	3.2	1.7	.97
18	16	65	43	15	46	149	177	30	4.6	2.9	1.8	.91
19	15	47	33	12	53	110	109	28	4.4	2.4	1.4	.84
20	362	106	26	10	47	652	85	26	6.2	2.5	1.2	.91
21	457	130	23	9.4	39	312	722	25	5.4	2.2	1.2	.91
22	896	65	96	11	34	276	1720	24	4.3	2.2	1.1	.84
23	376	1180	45	12	32	183	471	238	18	2.5	.78	1.6
24	141	443	35	63	31	115	332	59	24	2.5	.72	16
25	74	138	25	191	67	126	154	38	11	3.1	.72	59
26	33	68	22	83	102	118	100	66	6.7	17	.78	226
27	23	179	19	111	64	99	89	40	5.2	62	.91	43
28	18	714	18	39	58	464	107	40	3.9	12	5.0	18
29	12	184	17	27	50	322	75	66	2.9	29	3.6	9.8
30	11	93	17	22	---	129	155	38	2.4	9.8	4.3	6.7
31	9.8	---	16	20	---	88	---	29	---	5.4	2.2	---
TOTAL	2467.67	4115.0	4899	994.4	1601	6889	8460	3079	271.6	1018.6	84.05	419.68
MEAN	79.6	137	158	32.1	55.2	222	282	99.3	9.05	32.9	2.71	14.0
MAX	896	1180	1660	191	195	914	1770	559	24	515	14	226
MIN	.51	7.6	16	9.4	22	45	52	24	2.4	2.0	.72	.84
CFSM	.93	1.60	1.84	.37	.64	2.58	3.28	1.16	.11	.38	.03	.16
IN.	1.07	1.78	2.12	.43	.69	2.98	3.66	1.33	.12	.44	.04	.18

CAL YR 1983 TOTAL 34381.35 MEAN 94.2 MAX 2510 MIN .51 CFSM 1.10 IN 14.89
WTR YR 1984 TOTAL 34299.00 MEAN 93.7 MAX 1770 MIN .51 CFSM 1.09 IN 14.85

03369500 VERNON FORK MUSCATATUCK RIVER AT VERNON, IN

LOCATION.--Lat 38°58'34", long 85°37'13", in NW¼SE¼ sec.10, T.6 N., R.8 E., Jennings County, Hydrologic Unit 05120207, at downstream end of left bank bridge pier, 1 mile southwest of Vernon, 3.1 miles downstream from Otter Creek, and at mile 36.4.

DRAINAGE AREA.--198 mi².

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1305. Prior to October 1979, published as Vernon Fork at Vernon.

REVISED RECORDS.--WSP 1335: 1940, 1953. WSP 1909: 1952-53. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 585.00 ft National Geodetic Vertical Datum of 1929, (levels by State of Indiana, Department of Natural Resources). Prior to Jan. 14, 1940, and June 23 to Nov. 13, 1967, nonrecording gage, and Jan. 14, 1940, to June 22, 1967, water-stage recorder at site on right bank. Prior to Aug. 8, 1983, datum 2.30 ft higher.

REMARKS.--Records good except those for winter periods, which are poor. Diversion above station for municipal water supply of North Vernon and Vernon. Part of this diversion returned above gage as sewage effluent by North Vernon Sewage Treatment Plant. Some regulation at times at low flow by Old Timbers Lake on Jefferson Proving Grounds.

AVERAGE DISCHARGE.--45 years, 222 ft³/s, 15.23 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 56,800 ft³/s Jan. 21, 1959, from rating curve extended above 24,000 ft³/s on basis of slope-area measurement of peak flow, gage height, 35.13 ft, present datum, from high-water mark. No flow at times in 1940, 1943-44.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 6,000 ft³/s and maximum (*) at present datum:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 23	2000	6500	13.51	Apr. 22	0900	*7070	*14.11
Dec. 12	0400	7020	14.06				

Minimum daily discharge, 0.64 ft³/s Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.64	33	185	35	64	144	219	247	60	5.4	14	9.7
2	.76	31	150	47	90	154	180	164	51	4.3	12	6.9
3	.94	33	229	58	650	212	190	650	43	3.9	9.7	15
4	1.1	29	1290	54	513	216	552	1840	36	126	151	39
5	9.4	30	637	64	230	1380	4130	732	30	843	66	35
6	3.7	29	408	75	145	1380	983	557	27	506	37	19
7	1.5	26	322	90	80	514	453	468	24	203	22	12
8	1.5	25	204	72	70	348	287	526	20	92	18	8.0
9	1.5	23	165	60	60	238	243	410	20	49	71	5.5
10	1.6	26	142	75	71	203	228	259	17	34	25	5.4
11	1.2	117	1090	61	99	195	185	200	15	26	16	5.0
12	1.7	197	4310	52	201	158	158	173	13	22	15	4.2
13	14	110	901	42	367	379	363	158	12	17	12	3.8
14	14	80	534	38	369	868	280	166	12	14	12	6.0
15	11	119	486	35	228	564	197	129	12	12	8.7	5.3
16	13	441	260	34	175	2220	348	101	13	13	6.0	3.5
17	9.2	334	178	33	159	668	979	86	12	11	4.3	2.5
18	43	197	138	31	150	428	520	75	9.5	7.9	3.8	3.0
19	68	140	98	28	156	335	342	67	12	6.5	3.3	3.5
20	845	199	80	25	159	1620	261	61	9.4	5.3	3.6	3.4
21	2700	441	87	23	121	1040	1520	58	7.9	4.8	3.1	3.0
22	2510	209	319	23	101	745	4550	58	9.5	4.3	3.0	1.9
23	1620	2420	150	25	90	534	1240	327	11	3.7	3.8	12
24	438	1560	100	150	85	337	1110	190	206	3.6	3.6	177
25	280	465	55	300	174	308	519	95	51	3.2	3.1	185
26	140	244	45	220	338	381	334	207	25	64	2.5	853
27	98	349	47	348	216	280	273	156	16	161	1.9	184
28	81	2070	54	197	189	867	292	92	12	63	215	74
29	62	593	64	118	164	1220	235	152	10	77	76	41
30	45	319	54	80	---	421	352	106	7.4	38	24	28
31	36	---	41	60	---	283	---	77	---	19	14	---
TOTAL	9052.74	10889	12823	2553	5514	18640	21523	8587	803.7	2442.9	860.4	1754.6
MEAN	292	363	414	82.4	190	601	717	277	26.8	78.8	27.8	58.5
MAX	2700	2420	4310	348	650	2220	4550	1840	206	843	215	853
MIN	.64	23	41	23	60	144	158	58	7.4	3.2	1.9	1.9
CFSM	1.48	1.83	2.09	.42	.96	3.04	3.62	1.40	.14	.40	.14	.30
IN.	1.70	2.05	2.41	.48	1.04	3.50	4.04	1.61	.15	.46	.16	.33

CAL YR 1983 TOTAL 90844.22 MEAN 249 MAX 5670 MIN .40 CFSM 1.26 IN 17.07
WTR YR 1984 TOTAL 95443.34 MEAN 261 MAX 4550 MIN .64 CFSM 1.32 IN 17.93

03371500 EAST FORK WHITE RIVER NEAR BEDFORD, IN

LOCATION.--Lat 38°46'10", long 86°24'30"~~, in SW¼NE¼~~ sec.21, T.4 N., R.1 E., Lawrence County, Hydrologic Unit 05120208, on downstream side of center pier of bridge on county road, 0.4 mile upstream from Mill Creek, 2.9 miles downstream from Sugar Creek, 3.9 miles northeast of Mitchell, 7.8 miles southeast of Bedford, and at mile 153.3.

DRAINAGE AREA.--3,861 mi².

PERIOD OF RECORD.--May 1939 to current year (high-water records only October 1943 to September 1957).

REVISED RECORDS.--WSP 2109: Drainage area. WDR IN-73-1: 1972.

GAGE.--Water-stage recorder. Datum of gage is 473.59 ft National Geodetic Vertical Datum of 1929. Prior to Feb. 6, 1940, nonrecording gage, and Feb. 6, 1940, to Sept. 24, 1957, water-stage recorder, at site 9.8 miles downstream at datum 4.39 ft lower.

REMARKS.--Records good, except those for period of no gage-height record, which is fair.

AVERAGE DISCHARGE.--31 years (1939-43, 1957 to current year), 3,928 ft³/s, 13.81 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 75,700 ft³/s Mar. 12, 1964; maximum gage height, 35.97 ft May 11, 1961; minimum daily discharge, 138 ft³/s Sept. 7, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 47.5 ft, from floodmark determined by Corps of Engineers, discharge, 155,000 ft³/s, at former site.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 13,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 28	1700	14000	17.75	Mar. 24	2200	16500	19.52
Dec. 17	0600	16500	19.52	Apr. 8	1600	18200	20.52
				Apr. 26	1800	*31000	*26.44

Minimum daily discharge, 321 ft³/s Oct. 3.

NOTE.--No gage-height record Dec. 22 to Feb. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	329	2500	13200	2900	2800	4760	10900	11100	3440	1160	1150	730
2	325	1790	12900	2900	2500	4370	9670	8610	3050	1090	1070	650
3	321	1530	11600	2900	2700	4260	8050	6840	2740	1020	956	609
4	330	1370	9900	2900	3680	4540	6630	7550	2500	1880	891	584
5	361	1270	8830	2800	5840	5100	8370	9350	2300	2630	915	570
6	384	1190	8810	2700	6900	6770	10400	10200	2140	3660	1450	560
7	379	1140	9090	2750	6900	8150	13800	10500	1990	5110	1430	553
8	361	1090	8950	2800	4700	9280	17800	10800	1870	5250	1200	550
9	370	1050	8000	2700	3890	9460	16900	10800	1760	4070	1060	542
10	383	1030	6700	2600	3410	8710	14000	10200	1660	2870	955	535
11	379	1080	5880	2500	3310	6910	11300	9280	1570	2210	925	525
12	373	1470	7360	2400	3630	5320	9060	7850	1500	1820	950	509
13	392	2370	9090	2200	5920	4640	7290	6140	1430	1580	937	498
14	404	3720	11100	2100	7880	4850	6730	5320	1390	1420	882	500
15	433	3910	14000	2000	8680	5910	6550	4850	1330	1290	862	523
16	448	3700	16000	1900	8680	8590	6070	4510	1300	1190	809	513
17	452	4000	16400	1800	7580	9130	5760	4120	1320	1110	758	482
18	487	4590	15000	1700	6310	10000	6470	3780	1300	1050	719	477
19	502	4660	11900	1600	5610	11600	7930	3440	1260	987	688	477
20	1200	4220	8700	1500	5150	13900	8420	3190	1290	952	662	473
21	5050	3860	6000	1400	4760	15600	9370	3000	1320	903	637	464
22	7780	3980	5000	1500	4390	15100	14800	2830	1540	871	632	456
23	9360	5150	5000	1550	3950	15600	16600	3140	1480	841	636	480
24	9740	7540	4500	1600	3550	16400	19500	4290	1330	819	629	536
25	10600	8430	3500	1800	3520	16300	26500	6010	1270	797	616	614
26	11200	9540	3000	3000	3980	14800	30500	7160	1820	775	595	731
27	11300	10900	3200	4300	4510	12600	29900	6750	1800	770	577	1170
28	10400	13700	3400	4400	4980	11300	25800	5800	1570	853	569	1870
29	8540	13200	3400	4200	5000	11200	20100	4820	1370	1130	562	1630
30	6420	12800	3200	3900	---	11200	14500	4150	1240	1230	590	1320
31	4320	---	3000	3200	---	11400	---	3830	---	1180	806	---
TOTAL	103323	136780	256610	78500	144710	297750	399670	200210	51880	52518	26118	20131
MEAN	3333	4559	8278	2532	4990	9605	13320	6458	1729	1694	843	671
MAX	11300	13700	16400	4400	8680	16400	30500	11100	3440	5250	1450	1870
MIN	321	1030	3000	1400	2500	4260	5760	2830	1240	770	562	456
CFSM	.86	1.18	2.14	.66	1.29	2.49	3.45	1.67	.45	.44	.22	.17
IN.	1.00	1.32	2.47	.76	1.39	2.87	3.85	1.93	.50	.51	.25	.19

CAL YR 1983 TOTAL 1763853 MEAN 4832 MAX 50400 MIN 321 CFSM 1.25 IN 16.99
WTR YR 1984 TOTAL 1768200 MEAN 4831 MAX 30500 MIN 321 CFSM 1.25 IN 17.04

03371520 BACK CREEK AT LEESVILLE, IN

LOCATION.--Lat 38°50'48", long 86°18'06", in SW¼SE¼ sec.21, T.5 N., R.2 E., Lawrence County, Hydrologic Unit 05120208, on left bank at downstream side of county road bridge, 0.9 mile west of Leesville, 2.5 miles upstream from Jones Defeat Hollow, and 7 miles above mouth.

DRAINAGE AREA.--24.1 mi².

PERIOD OF RECORD.--October 1970 to current year.

REVISED RECORDS.--WDR IN-72-1: 1971.

GAGE.--Water-stage recorder. Datum of gage is 575.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--14 years, 34.7 ft³/s, 19.55 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,300 ft³/s July 21, 1973, gage height, 14.0 ft, from floodmarks, from rating extended above 550 ft³/s on basis of step-backwater analysis and contracted-opening and flow-over-road measurement of peak flow; no flow at times during 1971, 1975, 1976, 1981, and 1984.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1913 reached a stage of 18.1 ft from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 21	0815	1280	5.76	Nov. 27	1845	*1720	*6.33
Nov. 23	1115	1210	5.67	Apr. 22	0245	1280	5.74

Minimum daily discharge, no flow Sept. 1-2, 6-8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	7.1	33	6.2	17	23	37	73	8.7	1.4	1.4	.00
2	.10	6.7	31	6.8	27	27	28	62	6.8	1.3	1.3	.00
3	.08	7.0	37	7.2	85	35	35	86	5.2	1.1	1.2	.06
4	.09	6.4	67	7.6	31	46	146	174	4.6	245	1.5	.08
5	.64	5.6	51	8.0	20	68	262	111	4.1	152	3.2	.05
6	.46	5.1	47	8.2	16	87	120	127	3.9	51	2.5	.00
7	.36	4.9	37	8.0	14	63	74	108	3.6	24	2.0	.00
8	.24	4.6	33	7.8	12	45	54	106	3.1	13	1.6	.00
9	.18	4.3	28	7.4	11	35	47	86	2.9	8.3	1.4	.03
10	.14	8.1	24	6.8	16	23	39	71	2.6	5.2	1.3	.14
11	.14	17	101	6.7	23	19	31	59	2.3	4.4	5.7	.14
12	.14	13	114	6.3	35	16	36	49	2.3	3.9	2.8	.09
13	.81	11	65	6.5	130	32	71	56	2.1	3.5	2.0	.05
14	.87	8.7	79	6.4	90	43	51	50	3.2	3.2	1.5	39
15	.63	14	63	6.4	66	46	41	39	3.1	3.1	1.0	3.1
16	.46	21	44	6.3	45	192	41	31	2.4	2.8	.83	2.1
17	.41	19	29	6.0	42	88	51	24	2.3	2.5	.64	1.5
18	1.3	15	25	5.5	38	61	44	20	1.8	2.4	.55	1.0
19	1.2	12	21	5.0	34	50	36	16	8.2	2.0	.41	.79
20	356	23	20	4.4	30	243	29	14	3.6	1.9	.30	.59
21	539	20	35	4.2	25	137	290	12	3.2	1.7	.20	.43
22	310	14	78	5.0	20	113	642	9.8	2.8	1.6	.26	.35
23	119	346	50	10	18	76	205	23	2.4	1.4	.32	26
24	49	73	25	21	20	58	141	11	6.2	1.3	.24	45
25	29	31	14	16	40	76	104	6.9	3.2	1.1	.18	27
26	21	16	9.2	13	52	65	84	61	2.5	1.4	.14	47
27	16	314	8.0	10	47	70	80	23	2.7	2.3	.13	6.4
28	13	201	7.2	7.2	38	180	131	24	2.6	1.8	.17	3.6
29	11	75	6.8	6.4	29	138	91	21	2.1	3.0	.18	3.0
30	8.8	47	6.2	6.0	---	77	92	15	1.7	2.4	.13	2.8
31	8.2	---	6.0	12	---	51	---	12	---	1.8	.04	---
TOTAL	1488.35	1350.5	1194.4	244.6	1071	2283	3133	1580.7	106.2	551.8	35.12	210.30
MEAN	48.0	45.0	38.5	7.89	36.9	73.6	104	51.0	3.54	17.8	1.13	7.01
MAX	539	346	114	21	130	243	642	174	8.7	245	5.7	47
MIN	.08	4.3	6.0	4.2	11	16	28	6.9	1.7	1.1	.04	.00
CFSM	1.99	1.87	1.60	.33	1.53	3.05	4.32	2.12	.15	.74	.05	.29
IN.	2.30	2.08	1.84	.38	1.65	3.52	4.84	2.44	.16	.85	.05	.32

CAL YR 1983 TOTAL 13414.90 MEAN 36.8 MAX 812 MIN .08 CFSM 1.53 IN 20.71
WTR YR 1984 TOTAL 13248.97 MEAN 36.2 MAX 642 MIN .00 CFSM 1.50 IN 20.45

03372300 STEPHENS CREEK NEAR BLOOMINGTON, IN

LOCATION.--Lat 39°10'11", long 86°25'07", in NE¼NW¼ sec.4, T.8 N., R.1 E., Monroe County, Hydrologic Unit 05120208, on downstream side of right pier of bridge on State Highway 46, 0.2 mile downstream from Kerr Creek, 4.0 miles west of Belmont, and 6.1 miles east of Bloomington.

DRAINAGE AREA.--10.9 mi^2.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 550.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--14 years, 14.2 ft^3/s, 17.69 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,400 ft^3/s July 13, 1979, gage height, 13.18 ft from rating curve extended above 1,200 ft^3/s on basis of contracted-opening measurements at gage heights of 11.52 ft and 13.18 ft; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 350 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 16	0045	637	8.59	Apr. 22	0600	*1250	*10.51
Apr. 4	2100	994	9.88				

Minimum daily discharge, .02 ft^3/s Oct. 4-5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	1.6	9.0	1.7	3.0	14	20	18	5.4	.27	.78	.13
2	.03	1.7	6.6	1.9	5.2	12	15	15	3.7	.27	.61	.13
3	.03	1.8	6.3	2.0	26	18	18	19	2.8	.29	.53	.18
4	.02	1.7	27	2.1	14	18	256	22	2.3	3.1	.46	.13
5	.02	1.7	21	2.2	10	60	221	20	1.8	2.8	.43	.13
6	.17	1.7	21	2.3	8.7	56	62	27	1.4	1.6	.38	.13
7	.13	1.6	16	2.5	7.6	39	42	27	1.2	1.1	.32	.13
8	.10	1.4	12	2.4	6.4	31	30	24	1.0	.85	.32	.13
9	.07	1.4	9.8	2.3	5.4	25	26	20	.93	.78	.32	.13
10	.05	7.3	7.6	2.3	8.7	20	21	16	.75	.70	.31	.13
11	.04	34	62	2.1	12	16	17	14	.65	.78	.31	.13
12	.04	11	74	2.0	18	12	22	12	.57	.66	.28	.13
13	.04	6.3	37	1.9	71	12	33	15	.54	.59	.31	.13
14	.20	4.4	33	1.8	44	12	27	14	.45	.51	.27	.15
15	.24	4.6	29	1.8	28	62	23	12	.38	.60	.25	.13
16	.16	6.6	20	1.8	23	194	23	9.8	.55	.45	.20	.13
17	.13	6.3	10	1.7	21	57	27	8.0	.40	.41	.21	.08
18	.12	5.2	8.6	1.6	19	38	25	6.3	.33	.40	.25	.08
19	.35	4.2	7.4	1.5	20	28	21	5.2	.33	.37	.20	.07
20	2.4	4.4	6.2	1.4	16	143	17	3.9	.33	.43	.17	.07
21	98	4.4	6.0	1.4	13	64	104	3.7	.33	.37	.13	.07
22	29	3.9	9.0	1.3	11	53	342	22	.33	.33	.17	.07
23	11	65	18	1.4	9.4	36	72	101	.33	.27	.14	.21
24	5.6	34	12	2.9	10	29	54	34	.33	.25	.13	.14
25	3.5	17	7.0	6.4	24	34	38	19	.30	.27	.14	.16
26	2.6	9.8	4.0	5.2	28	29	29	15	.29	11	.13	.20
27	2.3	66	3.0	4.0	25	29	23	9.4	.37	2.7	.13	.20
28	2.0	62	2.6	3.1	21	48	27	13	.27	5.1	.13	.18
29	1.8	26	2.3	2.5	15	51	23	12	.27	3.6	.14	.14
30	1.7	14	2.0	2.0	---	34	22	9.0	.27	1.6	.13	.13
31	1.6	---	1.8	1.9	---	25	---	7.3	---	1.1	.13	---
TOTAL	163.47	411.0	491.2	71.0	523.4	1299	1680	553.6	28.90	43.55	8.41	3.95
MEAN	5.27	13.7	15.8	2.29	18.0	41.9	56.0	17.9	.96	1.40	.27	.13
MAX	98	66	74	6.4	71	194	342	101	5.4	11	.78	.21
MIN	.02	1.4	1.8	1.3	3.0	12	15	3.7	.27	.25	.13	.07
CFSM	.48	1.26	1.45	.21	1.65	3.84	5.14	1.64	.09	.13	.03	.01
IN.	.56	1.40	1.68	.24	1.79	4.43	5.73	1.89	.10	.15	.03	.01

CAL YR 1983 TOTAL 5466.68 MEAN 15.0 MAX 350 MIN .00 CFSM 1.38 IN 18.66
WTR YR 1984 TOTAL 5277.48 MEAN 14.4 MAX 342 MIN .02 CFSM 1.32 IN 18.01

03372500 SALT CREEK NEAR HARRODSBURG, IN

LOCATION.--Lat 39°00'16", long 86°30'31", in NE¼NW¼ sec.34, T.7 N., R.1 W., Monroe County, Hydrologic Unit 05120208, on right bank 0.35 mile downstream from Monroe Lake, 0.9 mile upstream from Clear Creek, 2.2 miles southeast of Harrodsburg, and 25.7 miles upstream from mouth.

DRAINAGE AREA.--432 mi².

PERIOD OF RECORD.-May 1955 to current year.

REVISED RECORDS.--WSP 1705: 1959. WSP 1725: 1956(M). WSP 2109: Drainage area.

GAGE.--None. Datum of gage was 480.00 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Oct. 1, 1960, to Sept. 30, 1974, water-stage recorder at site described in "LOCATION" paragraph. Prior to Oct. 1, 1960, nonrecording gage at site 0.7 mile upstream at datum 2.41 ft higher.

REMARKS.--Flow regulated by Monroe Lake. Daily discharge computed from relation between discharge, head, and gage openings for Monroe Lake beginning Oct. 1, 1974.

COOPERATION.--Records of daily discharge furnished by Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--29 years, 494 ft³/s, 15.53 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,000 ft³/s June 25, 1960, gage height, 32.76 ft site and datum then in use; maximum gage height at present site and datum, 35.35 ft May 9, 1961; no flow Sept. 29 to Dec. 2, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,200 ft³/s May 17; minimum daily, 45 ft³/s Aug. 20-Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	54	1370	1240	221	835	197	1490	599	46	46	45
2	52	54	1560	1630	221	156	197	915	152	46	46	45
3	52	54	1550	1610	401	54	197	514	46	46	46	45
4	52	54	1550	1640	689	54	198	1310	46	46	46	45
5	52	54	1550	1690	795	54	205	2020	46	46	46	45
6	52	54	1540	1670	793	55	211	1920	46	46	46	45
7	52	54	1540	1660	336	56	213	1880	46	46	45	45
8	52	54	1620	1650	423	56	213	2110	46	46	46	45
9	52	54	1670	1340	932	56	213	2100	46	46	46	45
10	52	54	1660	1630	927	57	695	2100	46	46	46	45
11	52	54	1660	1430	925	57	1620	2190	46	46	46	45
12	52	54	1100	901	925	57	1930	2160	46	46	46	45
13	52	54	860	481	1110	57	1740	1630	46	46	46	45
14	52	54	1050	296	1450	57	1740	1780	46	46	46	45
15	52	54	1050	237	1580	57	1730	2060	46	46	46	45
16	52	54	579	178	1570	58	1820	2150	46	46	46	45
17	52	54	202	110	1570	59	1870	2200	46	46	46	45
18	52	54	202	55	1560	60	1950	2190	46	46	46	45
19	52	54	671	55	1240	60	2000	2180	46	46	46	45
20	52	54	1340	55	573	61	1670	2020	46	46	45	45
21	53	54	1590	55	340	62	1130	2060	46	46	45	45
22	53	69	1650	55	340	62	545	2040	46	46	45	45
23	54	178	1650	55	340	62	219	1970	46	46	45	45
24	54	539	1630	55	340	63	223	2150	46	46	45	45
25	54	949	1630	55	269	63	224	2140	46	46	45	45
26	54	1070	1610	55	343	63	225	2130	46	46	45	45
27	54	1070	1600	55	794	63	225	2120	46	46	45	45
28	54	1070	1590	90	1060	64	226	1840	46	46	45	45
29	54	1000	1660	184	1050	64	486	1240	46	46	45	45
30	54	892	1680	221	---	147	1130	856	46	46	45	45
31	54	---	1660	221	---	196	---	728	---	46	45	---
TOTAL	1632	7971	42274	20959	23117	2925	25242	56193	2039	1426	1414	1350
MEAN	52.6	266	1364	676	797	94.4	841	1813	68.0	46.0	45.6	45.0
MAX	54	1070	1680	1690	1580	835	2000	2200	599	46	46	45
MIN	52	54	202	55	221	54	197	514	46	46	45	45
CFSM	.12	.62	3.16	1.57	1.85	.22	1.95	4.20	.16	.11	.11	.10
IN.	.14	.69	3.64	1.80	1.99	.25	2.17	4.84	.18	.12	.12	.12

CAL YR 1983 TOTAL 245363 MEAN 672 MAX 2170 MIN 41 CFSM 1.56 IN 21.13
WTR YR 1984 TOTAL 186542 MEAN 510 MAX 2200 MIN 45 CFSM 1.18 IN 16.06

BEST COPY AVAILABLE

03373500 EAST FORK WHITE RIVER AT SHOALS, IN

LOCATION.--Lat 38°40'02", long 86°47'31", in SW¼NW¼ sec.30, T.3 N., R.3 W., Martin County, Hydrologic Unit 05120208, at left downstream side of U.S. Highway 50 bridge at Shoals, 340 ft upstream from Baltimore and Ohio Railroad bridge, 0.9 mile upstream from Beaver Creek, 6.6 mi downstream from Indian Creek, and at mile 105.3.

DRAINAGE AREA.--4,927 mi².

PERIOD OF RECORD.--June 1903 to July 1906, October 1908 to September 1916, June 1923 to current year. Monthly discharge only for some periods, published in WSP 1305. Published as East Branch White River at Shoals, 1903-6, 1908-16. Gage-height records collected at same site since May 1908 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 353: 1912. WSP 1335: 1903-6. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 442.25 ft National Geodetic Vertical Datum of 1929. See WSP 1725 for history of changes prior to Oct. 26, 1932.

REMARKS.--Records good. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--70 years (1903-5, 1909-16, 1923 to current year), 5,445 ft³/s, 15.01 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 160,000 ft³/s Mar. 28, 1913, gage height, 42.2 ft, from rating curve extended above 100,000 ft³/s; minimum daily, 64 ft³/s Oct. 6, 1935, as a result of filling Williams Reservoir.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 20,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 28	0400	27900	20.29

Minimum daily discharge, 397 ft³/s Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	400	4050	15800	5800	3730	6490	13600	16900	4680	1570	1370	829
2	397	2730	15900	5600	3500	5980	12400	13400	4160	1450	1330	825
3	402	2140	15600	5200	3730	5270	10700	10200	3480	1350	1250	745
4	415	1850	14600	4500	4790	5320	9540	9500	3040	3080	1160	685
5	469	1670	13400	4130	5750	6300	13800	11800	2810	5450	1110	659
6	501	1550	12400	3920	7540	8630	17000	13500	2630	5190	1160	636
7	524	1460	12300	4020	7700	9480	16000	14500	2460	5050	1630	624
8	487	1380	12300	4700	5910	10200	17200	14600	2310	5800	1620	606
9	454	1320	11500	5120	4590	10700	18500	14600	2210	5330	1440	595
10	446	1300	9960	4890	4410	10300	17700	14200	2110	4060	1270	596
11	453	1360	8960	4540	4430	9060	15500	13300	2010	3090	1170	600
12	460	1710	10900	4130	4570	6980	13700	12000	1950	2550	1140	590
13	480	2260	12500	3500	6140	5770	11900	10400	1890	2180	1160	567
14	511	3050	13100	2880	9770	5460	10500	9100	1850	1950	1160	549
15	528	4090	15400	2560	10500	6120	9890	7960	1750	1770	1110	552
16	528	4240	17200	2400	10800	10500	9440	7590	1670	1610	1060	568
17	536	4310	17800	2240	10200	13100	9060	7160	1650	1500	1030	576
18	561	4710	17300	2400	9100	11800	9100	6730	1720	1390	966	552
19	596	5090	15500	2400	7940	12600	10100	6350	1710	1310	917	527
20	1090	4950	12700	2090	6740	16100	11200	6120	1630	1220	876	519
21	8280	4550	9610	1250	5780	19200	13300	5750	1630	1150	822	508
22	13300	4310	8340	1390	5270	18800	21800	5540	1750	1130	809	497
23	12100	5300	8250	1130	4790	17900	26000	5370	1940	1070	830	551
24	11000	11700	7520	1310	4390	17800	24500	6210	1880	1020	766	659
25	11200	11300	5670	2510	4340	18100	22900	7510	1710	993	711	825
26	12000	11300	5000	3320	4790	18100	24600	9970	1770	955	687	1160
27	12600	12900	4900	4570	5270	16600	27000	10400	2250	955	675	1280
28	12300	18100	4900	5980	6090	15600	27700	9080	2200	1010	672	1530
29	10400	19200	5200	5390	6570	16500	25700	7690	1970	1110	665	1970
30	8190	16900	5600	5000	---	15000	21300	6190	1730	1350	648	1730
31	6050	---	6000	4450	---	14000	---	5250	---	1410	667	---
TOTAL	127658	170780	346110	113320	179130	363760	491630	298870	66550	69053	31881	23110
MEAN	4118	5693	11160	3655	6177	11730	16390	9641	2218	2228	1028	770
MAX	13300	19200	17800	5980	10800	19200	27700	16900	4680	5800	1630	1970
MIN	397	1300	4900	1130	3500	5270	9060	5250	1630	955	648	497
CFSM	.84	1.16	2.27	.74	1.25	2.38	3.33	1.96	.45	.45	.21	.16
IN.	.96	1.29	2.61	.86	1.35	2.75	3.71	2.26	.50	.52	.24	.17

CAL YR 1983 TOTAL 2363781 MEAN 6475 MAX 48700 MIN 397 CFSM 1.31 IN 17.84
WTR YR 1984 TOTAL 2281852 MEAN 6235 MAX 27700 MIN 397 CFSM 1.27 IN 17.23

03373700 LOST RIVER NEAR WEST BADEN SPRINGS, IN

LOCATION.--Lat 38°35'10", long 86°38'03", in SW¼SE¼ sec.21, T.2 N., R.2 W., Orange County, Hydrologic Unit 05120208, on left bank 20 ft downstream from bridge on U.S. Highway 150, 1.7 miles northwest of West Baden Springs, 3.8 miles downstream from Lick Creek, and at mile 34.8.

DRAINAGE AREA.--287 mi².

PERIOD OF RECORD.--December 1964 to current year. Prior to October 1965, published as Lost River near West Baden.

GAGE.--Water-stage recorder. Datum of gage is 457.92 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good.

AVERAGE DISCHARGE.--19 years, 374 ft³/s, 17.72 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,100 ft³/s May 1, 1983, gage height, 26.55 ft; minimum daily, 7.5 ft³/s Oct. 8, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1964 reached a stage of 28.1 ft, from floodmarks, discharge, 14,500 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 28	2400	2150	20.33	Apr. 22	2300	*5280	*23.54

Minimum daily discharge, 12 ft³/s Sept. 19-22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	116	1110	148	165	222	774	706	129	37	38	16
2	13	110	696	141	193	231	627	573	119	35	36	15
3	13	103	[illegible]	157	353	366	549	521	110	34	35	17
4	17	87	707	154	557	454	720	927	103	728	39	17
5	46	85	739	215	421	786	1390	1210	97	1340	34	17
6	60	81	638	288	293	1040	1500	977	92	1190	31	16
7	35	77	563	343	216	832	1210	1110	88	705	28	15
8	24	74	484	269	172	637	867	1350	83	430	28	14
9	20	71	415	191	153	507	710	1230	79	326	27	15
10	19	69	360	179	148	409	614	969	76	255	27	16
11	19	81	423	171	195	354	534	759	72	195	27	14
12	19	98	979	145	241	309	478	616	69	161	26	14
13	28	94	1020	127	602	330	670	627	65	138	25	13
14	34	86	866	117	800	433	650	844	64	123	23	14
15	35	83	863	106	590	433	537	659	64	114	22	16
16	28	99	716	102	448	1380	467	510	72	104	21	14
17	25	130	554	98	361	1560	464	411	75	96	20	13
18	35	137	460	93	306	1250	443	353	70	87	19	13
19	56	124	386	86	283	923	393	313	62	80	19	12
20	230	135	326	80	262	1220	346	282	54	73	18	12
21	1050	249	299	82	232	1490	888	258	51	68	18	12
22	922	252	610	74	209	1390	4040	235	49	63	18	12
23	1070	705	605	76	191	1160	4700	235	47	59	18	28
24	804	1440	403	167	180	885	3110	229	73	56	19	52
25	464	1170	291	820	253	921	2030	197	68	56	19	101
26	333	736	252	642	310	1090	1510	247	52	55	18	265
27	255	768	229	514	277	999	1170	296	47	56	17	137
28	200	1900	220	390	262	1120	916	209	48	54	19	58
29	167	2100	227	272	239	1530	772	176	43	48	19	38
30	144	1600	183	210	---	1400	718	156	40	43	18	30
31	127	---	156	185	---	1050	---	140	---	40	17	---
TOTAL	6306	12860	16322	6642	8912	26711	33797	17325	2161	6849	743	1026
MEAN	203	429	527	214	307	862	1127	559	72.0	221	24.0	34.2
MAX	1070	2100	1110	820	800	1560	4700	1350	129	1340	39	265
MIN	13	69	156	74	148	222	346	140	40	34	17	12
CFSM	.71	1.50	1.84	.75	1.07	3.00	3.93	1.95	.25	.77	.08	.12
IN.	.82	1.67	2.12	.86	1.16	3.46	4.38	2.25	.28	.89	.10	.13

CAL YR 1983 TOTAL 179863 MEAN 493 MAX 8760 MIN 13 CFSM 1.72 IN 23.31
WTR YR 1984 TOTAL 139654 MEAN 382 MAX 4700 MIN 12 CFSM 1.33 IN 18.10

03373980 WHITE RIVER ABOVE PETERSBURG, IN

LOCATION.--Lat 38°31'42", long 87°15'14", in NE¼SW¼ sec.12, T.1 N., R.8 W., Pike County, Hydrologic Unit 05120202, on left bank 100 ft upstream from intake structure of Indianapolis Power and Light Company's generating plant, 1.5 miles downstream from East Fork White River, 2.2 miles upstream from State Highway 61, 2.8 miles northeast of Petersburg, and at mile 48.0.

DRAINAGE AREA.--11,123 mi².

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 401.52 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Discharges below 1500 ft³/s only published. For a complete record of White River in this vicinity use records of White River at Petersburg, IN (sta. 03374000), 2.3 miles downstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1260											---
2	1230											---
3	1210											---
4	1260											---
5	1840											---
6	1840											---
7	1560											---
8	1500											---
9	1540											---
10	1460											---
11	1350											---
12	1310											---
13	1320											---
14	1300											---
15	1260											---
16	1280											---
17	1330											---
18	1460											---
19	1470											---
20	2460											1620
21	---											1510
22	---											1560
23	---											1580
24	---											---
25	---											---
26	---											---
27	---											---
28	---											---
29	---											---
30	---											---
31	---											---
TOTAL	---											---
MEAN	---											---
MAX	---											---
MIN	---											---
CFSM	---											---
IN.	---											---

03374000 WHITE RIVER AT PETERSBURG, IN

LOCATION.--Lat 38°30'39", long 87°17'22", in SE¼SW¼ sec.15, T.1 N., R.8 W., Pike County, Hydrologic Unit 05120202, on left bank 300 ft downstream from bridge on State Highway 61, 0.4 mile upstream from Prides Creek, 1.4 miles north of Petersburg, and at mile 45.7.

DRAINAGE AREA.--11,125 mi².

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for October 1927, published in WSP 1305. Published as "at Hazleton" October 1927 to September 1938. Records published for both sites October 1937 to September 1938. Gage-height records collected at present site and datum since January 1935 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1305: 1930(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 400.00 ft National Geodetic Vertical Datum of 1929. See WSP 1725 for history of changes prior to Apr. 1, 1941.

REMARKS.--Records good. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--57 years, 11,790 ft³/s, 14.40 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 183,000 ft³/s Jan. 22, 1937, gage height, 28.3 ft present datum, 31.58 ft site and datum then in use; minimum daily, 573 ft³/s Oct. 1, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913, reached a stage of 29.5 ft, present site and datum, from floodmarks by Corps of Engineers, discharge, 235,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 68.500 ft³/s Apr. 28, gage height, 23.04 ft; minimum daily, 1,150 ft³/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1200	8200	32500	8820	7710	12700	37800	49100	11500	4310	3040	1770
2	1170	6160	28300	9130	7770	12400	33200	38800	10600	4090	2880	1870
3	1150	4810	26000	9190	9140	12500	28100	29500	9880	3880	2720	2000
4	1200	3990	24600	9000	10400	11900	25900	25300	8980	4900	2710	1940
5	1830	3530	22900	8890	11800	14400	30800	23300	8210	9930	4250	1830
6	1830	3270	22000	9150	12900	17200	35000	23800	7600	12600	3720	1750
7	1530	3080	21600	9580	14000	19300	38800	26900	7070	11100	3140	1730
8	1460	2920	21600	9760	13400	20000	42400	28700	6620	10200	3290	1730
9	1510	2790	21800	9870	11100	19900	44600	28000	6220	10100	3460	1720
10	1420	2720	21200	9830	9480	19300	44200	26600	5900	9260	3390	1740
11	1300	2730	19800	9200	9330	17800	40200	24600	6070	7920	3110	1740
12	1260	2720	21300	8600	10300	15500	34200	22400	5660	6520	2890	1690
13	1270	3180	24100	8060	14100	13400	29500	21100	5270	5490	2790	1650
14	1250	4520	27000	7120	18600	12000	25600	21400	5220	4870	2910	1670
15	1210	5520	29500	6270	22500	11700	22900	18600	5030	4400	2930	1690
16	1220	6570	32300	5750	24400	21000	21200	16200	4830	4030	2750	1630
17	1280	6790	34900	5420	24900	27100	20000	14700	5130	3750	2590	1590
18	1420	6780	36100	5190	23600	29500	20100	13600	5020	3490	2470	1610
19	1430	7080	34800	4500	21000	31000	20700	12600	4980	3260	2360	1660
20	2490	7500	29400	3700	18500	36900	21800	11700	4910	3040	2260	1590
21	8490	7640	23300	2600	16600	44100	26800	11100	4610	2880	2170	1530
22	14800	7420	19700	3000	14800	50300	41000	10600	4510	2750	2130	1470
23	18000	8210	17600	3500	13500	54000	52500	12400	4440	2690	2180	1550
24	16300	13200	16300	4060	12500	53400	58900	13700	4400	2610	2100	1800
25	14700	18500	13900	5870	11900	53600	64500	15200	4400	2490	2040	2170
26	14000	18300	9780	6560	11800	52900	66400	17400	4370	2460	2050	3490
27	13900	18600	8150	8240	11900	50700	67700	19200	4460	2400	2040	3170
28	13800	27200	8740	8890	12000	49300	68000	18500	4740	2400	1950	3060
29	13300	32100	8920	9790	12400	50600	64700	16900	4710	2570	1900	3310
30	12000	34400	8860	9180	---	47000	58000	14800	4470	3170	1840	3630
31	10100	---	8700	8400	---	42200	---	12900	---	3210	1790	---
TOTAL	177820	280430	675650	227120	412330	923600	1185500	639600	179810	156770	81850	59780
MEAN	5736	9348	21800	7326	14220	29790	39520	20630	5994	5057	2640	1993
MAX	18000	34400	36100	9870	24900	54000	68000	49100	11500	12600	4250	3630
MIN	1150	2720	8150	2600	7710	11700	20000	10600	4370	2400	1790	1470
CFSM	.52	.84	1.96	.66	1.28	2.68	3.55	1.85	.54	.46	.24	.18
IN.	.59	.94	2.26	.76	1.38	3.09	3.96	2.14	.60	.52	.27	.20

CAL YR 1983 TOTAL 5202210 MEAN 14250 MAX 21200 MIN 1150 CFSM 1.28 IN 17.40
WTR YR 1984 TOTAL 5000260 MEAN 13660 MAX 68000 MIN 1150 CFSM 1.23 IN 16.72

03374100 WHITE RIVER AT HAZLETON, IN
(National stream-quality accounting network station)

LOCATION.--Lat 38°29'23", long 87°33'00", in SE¼NW¼ sec.29, T.1 N., R.10 W., Gibson County, Hydrologic Unit 05120202, on downstream side of county road bridge (Old U.S. 41) at Hazleton, and at mile 18.7 (30.1 km).

DRAINAGE AREA.--11,305 mi² (29,280 km²).

PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: October 1973 to September 1981.
CHEMICAL ANALYSES: February 1973 to current year.
WATER TEMPERATURE: October 1973 to September 1981.
SEDIMENT DISCHARGE: October 1973 to current year (partial-record station).
WATER DISCHARGE: October 1927 to September 1938.

REMARKS.--Water discharge obtained from station White River at Petersburg (See sta 03374000).

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 33.5°C Aug. 14, 1976; 0.0°C on several days during winter period 1975-76.
SPECIFIC CONDUCTANCE: Maximum, 882 micromhos July 21, 1977; minimum, 192 micromhos Nov. 6, 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	CALCIUM DIS-SOLVED (MG/L AS CA)
NOV 07...	1430	3050	506	8.4	14.0	13.5	18	10.4	764	--	K110	60
FEB 09...	1430	10800	392	7.7	11.0	1.5	55	11.8	777	230	590	46
MAY 03...	0900	30400	373	7.1	17.0	16.5	24	9.0	741	440	140	52
JUL 25...	1445	2490	516	8.0	31.5	30.0	23	13.8	756	K10	3000	53

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)
NOV 07...	17	20	3.5	161	63	26	.30	7.4	315	2.0	.010	.70
FEB 09...	14	16	3.7	122	48	28	<.10	6.3	286	3.2	.480	2.3
MAY 03...	14	7.9	2.2	135	41	14	.20	6.7	316	2.9	<.010	2.6
JUL 25...	24	19	2.7	154	61	31	.20	.8	350	1.2	.140	1.2

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)
NOV 07...	.190	.58	.110	.080	10	1	65	<.5	<1	5	<3	5
FEB 09...	.310	.95	.130	.020	10	1	55	<.5	<1	8	<3	<10
MAY 03...	.090	.28	.020	.040	<10	1	55	<1.0	<1	<1	<3	3
JUL 25...	.170	--	.020	.010	20	1	66	1.0	<1	7	<3	2

03374100 WHITE RIVER AT HAZLETON, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 07...	29	4	<4	5	.5	<10	6	<1	<1	170	<6	5
FEB 09...	65	<100	5	9	.5	<10	<100	<1	<1	140	<6	8
MAY 03...	28	2	<4	7	.9	<10	1	<1	<1	130	<6	10
JUL 25...	8	1	7	2	.4	<10	2	<1	<1	210	<6	6

DATE	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 07...	50	412	--
FEB 09...	136	3970	94
MAY 03...	77	6320	93
JUL 25...	69	464	98

03374455 PATOKA RIVER NEAR HARDINSBURG, IN

LOCATION.--Lat 38°26'41", long 86°23'14", in NW¼SE¼ sec.10, T.1 S., R.1 E., Orange County, Hydrologic Unit 05120209, on downstream edge of center pier of county road bridge, 0.3 mile downstream from Fudge Creek, 0.7 mile northeast of Valeene, 6.0 miles southwest of Hardinsburg, and at mile 158.0.

DRAINAGE AREA.--12.8 mi^2.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 606.89 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--16 years, 26.1 ft^3/s, 27.65 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,270 ft^3/s July 26, 1979, gage height, 11.35 ft; no flow for several days in 1971, 1972, 1975, 1983, 1984.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 27	1945	1210	6.89	Apr. 22	0015	*1290	*7.07

Minimum daily discharge, No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	4.0	19	5.8	7.4	15	33	26	4.2	.67	.31	.09
2	.00	4.2	15	5.6	15	19	28	17	3.6	.88	.36	.06
3	.00	4.4	17	5.4	46	38	28	21	3.1	.43	.38	.17
4	.00	4.0	50	5.2	37	43	92	192	2.7	10	.35	.17
5	1.2	3.7	31	8.8	25	142	139	56	2.5	24	.30	.10
6	.57	3.3	24	11	14	79	78	46	2.4	5.5	.26	.09
7	.50	3.3	17	9.8	9.8	42	49	154	2.1	2.9	.23	.06
8	.50	3.0	15	7.6	7.7	31	38	121	2.0	2.0	.20	.04
9	.36	2.8	12	6.8	6.2	21	33	51	1.7	1.7	1.2	.02
10	.13	4.0	10	11	6.6	18	28	24	1.7	1.4	.47	.05
11	.06	12	62	8.2	8.1	17	24	16	1.6	1.2	.37	.03
12	.00	8.8	104	7.1	17	14	25	12	1.5	.95	.24	.02
13	1.6	5.5	53	6.5	86	29	59	15	1.3	.76	.17	.00
14	2.0	4.0	50	6.0	45	32	40	17	1.2	.69	.13	.02
15	1.2	5.7	44	5.7	28	27	33	11	1.1	.61	.10	.07
16	.95	18	25	5.4	22	145	32	8.8	1.1	.58	.07	.00
17	.84	15	18	4.7	18	63	35	7.1	1.0	.53	.51	.00
18	4.0	10	15	4.4	15	41	31	6.2	.94	.58	1.7	.00
19	4.0	7.4	13	4.0	16	56	26	5.5	.97	.54	.46	.00
20	39	28	11	4.5	14	182	23	4.9	.91	.46	.24	.00
21	51	27	12	3.9	12	109	413	4.6	1.0	.47	.17	.00
22	135	15	36	3.6	11	90	456	4.4	1.0	.40	.19	.00
23	51	211	16	4.0	10	67	141	42	1.0	.36	.23	8.0
24	18	96	12	4.5	10	53	70	13	1.4	.33	.18	11
25	11	35	9.6	8.2	27	148	37	7.9	.82	.66	.13	8.0
26	8.1	20	8.5	25	27	122	24	8.8	.70	.41	.09	5.9
27	6.4	345	7.9	19	21	82	17	6.8	.74	.43	.06	2.5
28	4.9	201	7.4	14	19	116	21	6.6	.77	.96	.31	1.5
29	4.4	59	7.1	11	15	104	17	6.2	.79	.46	.40	1.1
30	4.2	30	6.6	9.2	---	59	53	5.3	.73	.36	.24	.96
31	3.7	---	6.0	7.9	---	42	---	4.7	---	.31	.14	---
TOTAL	354.61	1130.1	734.1	242.8	595.8	2046	2123	921.8	46.57	61.53	10.19	39.95
MEAN	11.4	39.7	23.7	7.83	20.5	66.0	70.8	29.7	1.55	1.98	.33	1.33
MAX	135	345	104	25	86	182	456	192	4.2	24	1.7	11
MIN	.00	2.8	6.0	3.6	6.2	14	17	4.4	.70	.31	.06	.00
CFSM	.89	3.10	1.85	.61	1.60	5.16	5.53	2.32	.12	.16	.03	.10
IN.	1.03	3.46	2.13	.71	1.73	5.95	6.17	2.68	.14	.18	.03	.12

CAL YR 1983 TOTAL 11292.69 MEAN 30.9 MAX 985 MIN .00 CFSM 2.41 IN 32.82
WTR YR 1984 TOTAL 8366.45 MEAN 22.9 MAX 456 MIN .00 CFSM 1.79 IN 24.31

03374500 PATOKA RIVER NEAR CUZCO, IN

LOCATION.--Lat 38°16'29", long 86°43'31", in SW¼SE¼ sec.10, T.1 S., R.3 W., Dubois County, Hydrologic Unit 05120209, on right bank 200 ft upstream from county road bridge, 2.1 miles downstream from Patoka Lake, 2.2 miles southwest of Cuzco, 2.8 miles upstream from Dillon Creek, and at mile 116.1.

DRAINAGE AREA.--171 mi^2.

PERIOD OF RECORD.--June 1961 to current year.

GAGE.--None. Datum of gage was 477.00 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 1, 1961, nonrecording gage on downstream side of bridge, 200 ft downstream at same datum. Oct. 1, 1961 to Sept. 30, 1981, water-stage recorder at site described in "LOCATION" paragraph. Prior to October 1979, published as "near Ellsworth".

REMARKS.--Flow regulated by Patoka Lake. Daily discharge computed from relation between discharge, head, and gate openings for Patoka Lake beginning Oct. 1, 1981.

COOPERATION.--Records of daily discharge furnished by Corps of Engineers beginning Oct. 1, 1981.

AVERAGE DISCHARGE.--23 years, 229 ft^3/s, 18.19 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,700 ft^3/s Mar. 10, 1964, gage height, 20.02 ft; no flow Oct. 30, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 19.1 ft according to information by local resident, discharge, 12,300 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 812 ft^3/s Apr. 1, 5-7; minimum daily, 20 ft^3/s Jul. 3-8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	144	297	100	751	145	496	812	302	154	33	39	39
2	144	297	100	750	145	496	811	164	154	25	39	39
3	144	297	100	748	145	496	646	202	154	20	39	39
4	144	297	100	747	146	497	688	303	188	20	39	39
5	144	227	100	746	146	497	812	303	209	20	39	39
6	176	170	100	744	146	498	812	303	209	20	39	39
7	191	296	100	743	146	498	812	304	249	20	39	39
8	191	296	283	742	146	498	811	305	300	20	39	39
9	191	210	399	740	146	498	810	305	299	37	39	39
10	191	189	399	534	146	497	809	305	299	49	40	39
11	191	296	300	386	146	497	808	305	299	49	40	39
12	191	296	201	263	146	389	807	305	299	49	39	39
13	191	295	201	173	146	308	806	305	164	49	39	39
14	213	295	201	146	230	308	805	305	49	49	39	39
15	225	295	202	146	374	308	580	305	109	49	39	39
16	225	295	202	145	406	308	310	305	201	49	39	39
17	225	295	202	73	406	309	310	305	201	49	39	39
18	225	295	277	109	307	309	310	305	179	49	39	39
19	181	294	400	145	143	309	310	305	153	49	39	39
20	69	294	527	145	143	148	200	305	153	49	25	39
21	23	294	602	145	143	51	100	304	123	49	28	39
22	23	223	603	145	143	52	101	304	104	49	39	39
23	23	78	651	145	143	150	101	304	104	44	39	39
24	75	48	698	145	143	427	101	304	104	39	39	46
25	139	203	698	145	143	504	174	260	66	39	39	49
26	198	296	696	145	143	505	302	304	49	39	39	49
27	261	198	695	145	143	264	302	198	35	39	39	49
28	298	100	694	145	283	215	302	49	33	39	39	49
29	298	100	727	145	497	313	302	49	33	39	39	49
30	298	100	754	145	---	514	302	49	33	39	39	49
31	297	---	752	145	---	772	---	97	---	39	39	---
TOTAL	5529	7166	12064	10571	5685	11931	15156	8068	4706	1208	1186	1237
MEAN	178	239	389	341	196	385	505	260	157	39.0	38.3	41.2
MAX	298	297	754	751	497	772	812	305	300	49	40	49
MIN	23	48	100	73	143	51	100	49	33	20	25	39
CFSM	1.04	1.40	2.28	1.99	1.15	2.25	2.95	1.52	.92	.23	.22	.24
IN.	1.20	1.56	2.62	2.30	1.24	2.60	3.30	1.76	1.02	.26	.26	.27

CAL YR 1983 TOTAL 138755 MEAN 380 MAX 2810 MIN 23 CFSM 2.22 IN 30.19
WTR YR 1984 TOTAL 84507 MEAN 231 MAX 812 MIN 20 CFSM 1.35 IN 18.38

03375500 PATOKA RIVER AT JASPER, IN

LOCATION.--Lat 38°24'49", long 86°52'36", in NW¼SE¼ sec.20, T.1 S., R.4 W., Dubois County, Hydrologic Unit 05120209, on left bank 0.3 mile upstream from unnamed outlet of Jasper Lake, 1.0 mile downstream from Coon Seits bridge, 1.2 miles downstream from Beaver Creek, 3.3 miles northeast of Jasper, and at mile 91.5.

DRAINAGE AREA.--262 mi².

PERIOD OF RECORD.--November 1947 to current year.

REVISED RECORDS.--WSP 1909: 1958. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 446.00 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Nonrecording gage at bridge 5.6 miles downstream, used for high-water periods when flow exceeds about 2,500 ft³/s, at datum 0.34 ft lower. Prior to Sept. 18, 1956, nonrecording gage at bridge 5.6 miles downstream at datum 0.34 ft lower.

REMARKS.--Records good. Flow regulated by Beaver Creek Reservoir beginning Oct. 11, 1955, and by Patoka Lake beginning Feb. 13, 1978 (See sta 03374498).

AVERAGE DISCHARGE.--36 years (water years 1949 to current year), 368 ft³/s, 19.07 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,100 ft³/s Mar. 11, 1964, gage height, 15.17 ft at downstream gage; maximum gage height at upstream gage, 21.20 ft Mar. 11, 1964, from floodmarks; no flow at times during 1948, 1952-56, 1963-65.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 15.9 ft at downstream site, from floodmark furnished by local residents, discharge, 16,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,860 ft³/s Apr. 23, gage height, 14.58 ft; minimum daily, 31 ft³/s July 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	155	331	246	977	225	540	887	426	98	35	39	47
2	155	334	209	887	256	571	936	394	156	35	39	47
3	156	338	221	885	368	689	944	277	156	33	40	49
4	162	337	441	886	436	696	953	546	154	147	39	49
5	249	337	407	906	326	967	1250	653	193	373	38	48
6	189	265	335	925	272	992	1380	516	217	153	38	48
7	195	204	312	939	231	752	1450	743	217	51	47	48
8	213	320	249	908	215	644	1330	965	256	36	51	48
9	213	326	405	894	209	595	1130	720	291	31	44	48
10	213	248	486	898	215	569	1020	524	292	34	43	50
11	213	226	595	614	244	556	975	458	292	52	42	49
12	215	331	805	444	278	539	946	418	292	51	42	49
13	223	330	565	315	539	479	1000	509	291	49	42	49
14	221	328	498	239	560	482	1020	612	152	49	42	52
15	239	333	553	206	444	458	994	470	49	49	42	65
16	250	343	420	170	508	888	724	415	99	49	42	52
17	250	346	341	170	506	800	537	387	193	49	42	49
18	280	342	306	180	489	563	507	369	199	48	42	48
19	282	339	376	200	376	626	461	354	186	48	42	48
20	342	365	463	200	246	1140	428	343	155	48	41	48
21	494	394	597	170	228	1230	751	335	177	48	40	48
22	330	368	861	150	219	808	1490	329	123	48	32	48
23	378	675	802	190	211	452	1800	333	100	47	59	140
24	154	1040	805	323	209	424	1620	325	101	46	52	203
25	128	501	852	633	254	816	916	318	100	39	48	206
26	181	362	865	436	262	914	482	289	70	39	47	330
27	231	629	832	355	245	816	486	316	49	39	47	133
28	297	1200	838	276	248	804	446	211	45	39	49	69
29	331	1030	845	246	403	1020	413	68	36	38	51	61
30	333	420	958	234	---	731	443	61	35	38	49	59
31	331	---	1060	228	---	737	---	59	---	38	48	---
TOTAL	7603	12942	17548	15084	9222	22298	27719	12743	4774	1879	1359	2288
MEAN	245	431	566	487	318	719	924	411	159	60.6	43.8	76.3
MAX	494	1200	1060	977	560	1230	1800	965	292	373	59	330
MIN	128	204	209	150	209	424	413	59	35	31	32	47
CFSM	.94	1.65	2.16	1.86	1.21	2.74	3.53	1.57	.61	.23	.17	.29
IN.	1.08	1.84	2.49	2.14	1.31	3.17	3.94	1.81	.68	.27	.19	.32

CAL YR 1983 TOTAL 204617 MEAN 561 MAX 3820 MIN 60 CFSM 2.14 IN 29.05
WTR YR 1984 TOTAL 135459 MEAN 370 MAX 1800 MIN 31 CFSM 1.41 IN 19.23

03375800 HALL CREEK NEAR ST. ANTHONY, IN

LOCATION.--Lat 38°21'45", long 86°49'43", in NW¼NW¼ sec.11, T.2 S., R.4 W., Dubois County, Hydrologic Unit 05120209, on downstream side of right pier of bridge on County Road 125 South, 0.7 mile upstream from Grassy Fork, 3.3 miles north of St. Anthony, and at mile 4.1.

DRAINAGE AREA.--21.8 mi².

PERIOD OF RECORD.--October 1970 to current year.

REVISED RECORDS.--WDR IN-75-1: 1971-74.

GAGE.--Water-stage recorder. Datum of gage is 459.22 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records fair.

AVERAGE DISCHARGE.--14 years, 33.9 ft³/s, 21.13 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft³/s July 26, 1979, gage height, 15.30 ft from contracted-opening and flow-over-the road measurements at gage height of 15.30 ft; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 950 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 23	1500	1310	10.92	Apr. 22	0100	*1540	*11.12
Nov. 27	2100	1230	10.82				

No flow, Oct. 10, July 29-31, Aug. 1-2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	1.8	18	7.6	12	20	28	20	2.8	.34	.00	.35
2	.01	1.6	17	7.0	14	48	24	15	2.3	2.4	.00	.25
3	.01	1.9	43	6.8	67	54	32	30	1.9	.74	5.4	1.3
4	.11	1.6	97	33	32	101	81	147	1.4	101	5.0	.60
5	33	1.1	42	25	21	201	209	45	1.3	101	2.5	.35
6	.86	.91	50	16	12	69	61	57	1.2	13	1.5	.22
7	.44	.84	29	12	9.6	43	40	204	.97	4.2	.96	.13
8	.24	.70	23	9.6	4.7	37	33	91	.67	1.6	3.6	.10
9	.12	.62	18	8.7	4.4	26	34	45	.54	.89	1.5	.15
10	.00	2.9	16	15	7.9	23	30	31	.49	.61	.90	.20
11	.02	7.4	137	12	31	20	25	22	.48	.89	1.5	.19
12	.02	4.6	144	7.8	37	17	39	16	.43	1.3	.72	.13
13	4.4	4.4	54	5.8	146	37	48	162	.42	.44	.44	.13
14	1.2	2.3	86	5.1	52	33	35	55	.37	.30	.27	.34
15	.39	3.7	56	4.8	37	32	29	30	.28	.97	.16	2.5
16	.24	6.7	31	4.6	30	147	33	20	.24	.81	.10	.34
17	.18	5.8	21	3.7	25	52	40	14	.22	.44	5.1	.26
18	46	4.8	17	3.5	21	41	33	11	.19	.30	3.4	.26
19	5.0	4.4	13	3.3	24	71	26	8.7	.16	.41	1.4	.13
20	212	26	9.4	2.3	18	330	21	6.7	21	.55	.82	.13
21	78	16	29	2.0	16	112	608	5.7	5.3	.48	.36	.13
22	217	10	105	2.1	14	79	481	6.2	3.2	.33	.31	.13
23	61	499	35	2.3	14	48	124	49	1.9	.20	.78	75
24	28	100	25	2.8	16	45	72	12	2.0	.20	.59	32
25	16	40	18	3.7	32	102	44	8.4	1.1	.40	.35	17
26	11	24	15	7.0	22	64	34	20	.70	1.2	.19	17
27	7.2	382	12	16	22	61	26	8.7	.32	.30	.11	3.5
28	5.2	176	10	8.7	22	144	20	8.1	.17	.10	1.9	2.0
29	3.6	48	12	5.5	20	69	17	6.0	.11	.00	1.3	2.0
30	2.6	27	10	8.7	---	44	36	4.4	.09	.00	.78	1.8
31	2.1	---	8.4	9.6	---	34	---	3.7	---	.00	.58	---
TOTAL	735.95	1406.07	1200.8	262.0	783.6	2204	2363	1163.6	52.25	235.40	42.52	158.62
MEAN	23.7	46.9	38.7	8.45	27.0	71.1	78.8	37.5	1.74	7.59	1.37	5.29
MAX	217	499	144	33	146	330	608	204	21	101	5.4	75
MIN	.00	.62	8.4	2.0	4.4	17	17	3.7	.09	.00	.00	.10
CFSM	1.09	2.15	1.78	.39	1.24	3.26	3.62	1.72	.08	.35	.06	.24
IN.	1.26	2.40	2.05	.45	1.34	3.76	4.03	1.99	.09	.40	.07	.27

CAL YR 1983 TOTAL 14476.94 MEAN 39.7 MAX 1240 MIN .00 CFSM 1.82 IN 24.70
WTR YR 1984 TOTAL 10607.81 MEAN 29.0 MAX 608 MIN .00 CFSM 1.33 IN 18.10

BEST COPY AVAILABLE

03376350 SOUTH FORK PATOKA RIVER NEAR SPURGEON, IN

LOCATION.--Lat 38°17'50", long 87°15'39", in SE¼NE¼ sec.35, T.2 S., R.8 W., Pike County, Hydrologic Unit 05120209, on right bank at downstream side of bridge on State Highway 61, 0.5 mile north of Enos Corner, 3.1 miles north of Spurgeon, and at mile 8.0.

DRAINAGE AREA.--42.8 mi².

PERIOD OF RECORD.--October 1964 to current year.

REVISED RECORDS.--WSP 2109: Drainage area. WDR IN-75-1: 1965-74(P).

GAGE.--Water-stage recorder. Datum of gage is 420.88 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Regulation by coal-washing operation and strip-mining above gage.

AVERAGE DISCHARGE.--20 years, 51.8 ft³/s, 16.44 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,900 ft³/s June 9, 1979, gage height, 15.07 ft, from rating curve extended above 3,300 ft³/s on basis of contracted-opening and flow over-the-road measurements at gage height of 15.07 ft; no flow Jan. 20-31, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1964 reached a stage of 13.09 ft, from floodmarks, discharge, 4,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 20	0200	*1480	*10.27	Apr. 22	0200	1090	9.08

Minimum daily discharge, 5.5 ft³/s Oct. 1-3, Sept. 7-8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	20	30	19	20	43	63	63	22	12	8.6	6.5
2	5.5	23	31	20	26	90	55	53	21	14	8.7	6.5
3	5.5	23	51	21	78	106	80	73	20	12	9.0	14
4	15	22	106	21	43	211	244	184	20	29	8.8	8.3
5	102	22	45	21	28	318	334	87	20	59	8.3	6.8
6	10	22	84	24	23	126	129	82	20	20	9.2	5.8
7	7.6	23	40	27	22	68	83	288	19	14	8.3	5.5
8	7.2	21	32	23	21	58	67	186	18	12	8.8	5.5
9	7.6	21	28	23	20	40	104	82	17	12	9.2	6.2
10	8.0	34	26	28	39	37	98	52	17	12	8.0	7.2
11	8.3	32	137	24	73	35	68	43	17	10	7.6	8.3
12	8.3	26	102	20	85	33	100	46	16	10	8.0	7.2
13	27	22	53	17	209	62	131	113	16	9.2	7.2	6.5
14	12	20	103	17	76	45	80	82	15	9.2	7.2	7.2
15	16	31	65	17	46	62	69	52	15	9.2	7.2	7.6
16	10	29	40	17	39	346	71	43	15	9.2	7.6	7.2
17	9.2	23	33	16	40	104	79	38	15	8.8	7.6	8.3
18	92	20	28	15	35	76	58	34	17	8.8	9.2	6.5
19	23	19	24	13	41	192	47	34	17	8.0	9.2	6.2
20	138	78	21	11	31	646	40	34	23	8.3	8.0	6.2
21	92	38	36	10	26	204	415	32	30	8.3	7.6	6.2
22	84	29	92	11	24	154	702	30	32	8.3	13	6.2
23	45	268	48	17	22	94	245	34	18	8.0	10	89
24	34	106	34	21	37	101	157	27	15	8.0	7.6	55
25	28	51	29	54	72	292	112	25	13	7.7	6.5	27
26	25	41	27	104	39	130	87	69	13	8.1	6.5	23
27	23	296	25	31	38	122	85	37	13	9.3	6.8	10
28	21	183	24	23	47	397	67	34	13	9.4	7.6	9.2
29	20	55	22	21	43	171	60	29	12	10	6.8	8.3
30	21	37	21	20	---	102	109	26	12	8.6	6.8	8.3
31	24	---	20	19	---	75	---	24	---	8.3	6.5	---
TOTAL	934.7	1635	1457	725	1343	4540	4040	2036	531	380.7	251.4	385.7
MEAN	30.2	54.5	47.0	23.4	46.3	146	135	65.7	17.7	12.3	8.11	12.9
MAX	138	296	137	104	209	646	702	288	32	59	13	89
MIN	5.5	19	20	10	20	33	40	24	12	7.7	6.5	5.5
CFSM	.71	1.27	1.10	.55	1.08	3.41	3.15	1.54	.41	.29	.19	.30
IN.	.81	1.42	1.27	.63	1.17	3.95	3.51	1.77	.46	.33	.22	.34

CAL YR 1983 TOTAL 27824.8 MEAN 76.2 MAX 1860 MIN 5.5 CFSM 1.78 IN 24.18
WTR YR 1984 TOTAL 18259.5 MEAN 49.9 MAX 702 MIN 5.5 CFSM 1.17 IN 15.87

03376500 PATOKA RIVER NEAR PRINCETON, IN

LOCATION.--Lat 38°23'30", long 87°32'55", in Location 107, T.1 S., R.10 W., Gibson County, Hydrologic Unit 05120209, on left bank 75 ft upstream from dam of Princeton Water and Lighting Co., 0.1 mile downstream from bridge on State Highway 65, 0.6 mile downstream from Indian Creek, 2 miles northeast of Princeton, and at mile 21.5.

DRAINAGE AREA.--822 mi².

PERIOD OF RECORD.--August 1934 to current year. Published as "at Patoka" August 1934 to September 1940. Records published for both sites October 1939 to September 1940 (monthly discharge only at present site, for October, November 1939, published in WSP 1305).

REVISED RECORDS.--WSP 1275: 1952. WSP 1335: 1935-36, 1938-39, 1949(M), 1940-50. WSP 1385: 1951-52. WSP 2109: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 394.14 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). See WSP 1725 for history of changes prior to Jan. 21, 1941.

REMARKS.--Records fair. Flow regulated by Patoka Lake.

AVERAGE DISCHARGE.--50 years, 1,032 ft³/s, 17.05 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,700 ft³/s Jan. 26, 1937, gage height, 26.80 ft, site and datum then in use; no flow Aug. 29 to Sept. 12, 1936.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,120 ft³/s Mar 28, gage height, 14.42 ft; minimum daily, 53 ft³/s Aug. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	408	2280	1510	957	723	3630	3610	229	91	60	67
2	129	398	2310	1520	965	818	3460	3400	217	88	59	65
3	128	392	2330	1510	1260	1140	3280	3200	193	86	59	63
4	167	391	2380	1470	1200	1400	3270	3050	248	158	60	69
5	814	389	2350	1470	1230	1950	3410	2760	259	393	87	74
6	612	387	2330	1500	1160	2030	3380	2620	256	749	77	83
7	524	386	2250	1510	928	2140	3340	2690	274	816	66	78
8	334	362	2150	1570	642	2200	3260	2670	289	510	56	69
9	227	263	1980	1650	515	2220	3170	2640	277	285	53	63
10	223	303	1710	1920	642	2210	3080	2620	300	171	91	62
11	225	393	1550	1660	767	2170	2990	2550	342	125	70	56
12	229	393	1550	1420	965	2080	2960	2470	354	98	63	74
13	242	346	1520	1210	1400	1990	3000	2470	360	90	76	76
14	278	374	1690	908	1480	1820	2940	2430	355	104	63	72
15	300	398	1720	630	1560	1780	2870	2330	340	99	61	74
16	281	420	1730	464	1610	2380	2790	2230	272	95	61	81
17	248	444	1720	391	1600	2250	2710	2120	146	94	61	106
18	312	450	1680	350	1510	2300	2620	1940	104	90	61	107
19	481	442	1510	350	1390	2480	2500	1660	203	89	62	89
20	812	459	1210	400	1240	3050	2370	1320	257	86	58	75
21	1100	571	938	450	1070	3090	3030	1030	439	82	58	67
22	1210	659	997	400	822	3270	3610	811	658	80	58	63
23	1240	984	1260	330	629	3380	3600	821	570	80	73	89
24	1250	1360	1520	400	540	3430	3760	722	402	76	78	364
25	1240	1410	1390	1020	664	3630	3890	711	380	75	74	676
26	1140	1470	1350	1270	789	3620	3930	702	315	73	75	974
27	795	1970	1370	1380	795	3620	3960	760	212	73	74	973
28	517	2200	1390	1400	765	3900	3910	821	164	75	67	815
29	403	2170	1420	1440	737	4010	3830	684	126	79	65	597
30	398	2240	1460	1420	---	3900	3750	520	103	72	66	411
31	410	---	1500	1200	---	3770	---	346	---	63	68	---
TOTAL	16398	22832	52545	34123	29832	78751	98300	58708	8644	5145	2060	6542
MEAN	529	761	1695	1101	1029	2540	3277	1894	288	166	66.5	218
MAX	1250	2240	2380	1920	1610	4010	3960	3610	658	816	91	974
MIN	128	263	938	330	515	723	2370	346	103	63	53	62
CFSM	.60	.86	1.92	1.25	1.17	2.88	3.72	2.15	.33	.19	.08	.25
IN.	.69	.96	2.22	1.44	1.26	3.32	4.15	2.48	.36	.22	.09	.28

CAL YR 1983 TOTAL 622810 MEAN 1706 MAX 12000 MIN 123 CFSM 1.93 IN 26.27
WTR YR 1984 TOTAL 413880 MEAN 1131 MAX 4010 MIN 53 CFSM 1.28 IN 17.46

03377500 WABASH RIVER AT MOUNT CARMEL, IL

LOCATION.--Lat 38°24'07", long 87°45'10", in SE¼NW¼ sec.28, T.1 S., R.12 W., Wabash County, Illinois, Hydrologic Unit 05120113, on right bank on downstream side of Southern Railway bridge at Mount Carmel, 0.2 mile downstream from Patoka River, and at mile 94.4.

DRAINAGE AREA.--28,635 mi^2.

PERIOD OF RECORD.--January 1908 to September 1913 (gage heights only), October 1927 to current year. Gage-height records collected in this vicinity November 1874 to December 1878, are contained in files of Louisville office of the Corps of Engineers and since June 1884, are contained in reports of National Weather Service.

REVISED RECORDS.--WDR IN-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 369.46 ft National Geodetic Vertical Datum of 1929. Oct. 1, 1949, to Feb. 8, 1977, at datum 2.00 ft higher. See WSP 1725 for history of changes prior to Sept. 30, 1949.

REMARKS.--Records good. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--57 years, 27,520 ft^3/s, 13.05 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 305,000 ft^3/s May 25, 1943; maximum gage height, 30.62 ft Feb. 5, 6, 1969, present datum; minimum daily discharge, 1,650 ft^3/s Sept. 27, 28, 1941.

EXTREMES OUTSIDE THE PERIOD OF RECORD.--(1874-78, 1884 to 1984) Maximum discharge, 428,000 ft^3/s Mar. 30, 1913, from rating curve extended above 310,000 ft^3/s, gage height, 33.0 ft, present site and datum.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 132,000 ft^3/s Apr. 27, gage height, 26.56 ft; minimum daily, 3,840 ft^3/s Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3840	15700	55400	21700	15500	33700	114000	111000	47900	12000	9080	4760
2	3950	13800	55600	20900	15700	30800	106000	101000	48000	11600	8520	4820
3	4010	11800	51400	20400	19100	29600	97700	88700	47700	10800	8060	4770
4	4200	10300	47700	20400	24300	29500	90700	76600	46900	11200	7860	4770
5	6850	9430	49000	20300	27500	32600	87600	65800	44800	14900	7710	4640
6	5950	8970	49400	20100	28700	37600	88400	57300	39400	19100	8540	4540
7	5300	8630	49000	20600	29300	39700	89400	55700	30500	20900	9050	4600
8	4990	8370	49100	21100	27800	39500	90600	57000	25000	19200	8370	4740
9	4620	8050	49700	21400	25200	37700	92300	55200	22100	17400	8030	4680
10	4420	7980	50100	21800	24000	35800	93100	50800	20100	16700	8220	4560
11	4280	7950	50100	21800	26100	33900	91000	46600	19400	15900	8910	4760
12	4220	7970	53900	20600	29700	31800	86200	42600	18100	15500	8830	4690
13	4260	7970	57100	19100	37100	29600	80000	40300	16800	14400	7850	4640
14	4200	8430	61500	17600	47200	27200	72800	45100	15700	12800	7450	4720
15	4250	10100	65600	16000	53700	25600	67100	44700	14900	11400	7250	4740
16	4260	11600	68300	14700	58400	31600	61900	40200	14200	10200	7070	4710
17	4240	12600	71700	13700	61700	46700	56100	34900	14200	9500	6860	4840
18	4390	13000	74900	12900	64400	56700	51600	30300	14500	8960	6640	4690
19	4540	13300	77300	11000	66300	62300	49500	27700	14100	8480	6240	4500
20	7340	13500	77300	10000	66900	70800	49000	25700	13800	7950	5910	4400
21	15200	13500	73800	9000	67300	78400	54700	24000	13200	7620	5650	4420
22	20100	13600	65500	9200	66600	86100	71500	23800	12900	7340	5600	4970
23	24200	14600	53900	9600	64000	94000	85500	28600	12600	7150	5460	5550
24	24600	20100	44800	10300	60800	102000	98100	37300	12100	7050	5370	5950
25	24500	25900	38400	12500	57600	110000	113000	41700	12400	6840	5240	7070
26	24600	28200	31400	14800	54300	115000	125000	43900	12900	6650	5210	7770
27	23600	30000	24700	16000	50400	118000	131000	46700	13000	6650	5240	8090
28	22000	44100	22300	16300	45400	120000	130000	48700	13100	7150	5220	7600
29	20700	53000	21700	16800	38900	124000	126000	49000	13100	9670	5130	7070
30	19500	54300	22200	17400	---	123000	120000	48500	12400	9790	4950	6810
31	17800	---	21900	16600	---	120000	---	48100	---	9630	4820	---
TOTAL	330910	506750	1584700	514600	1253900	1953200	2669800	1537500	655800	354470	214340	158870
MEAN	10670	16890	51120	16600	43240	63010	88990	49600	21860	11430	6914	5296
MAX	24600	54300	77300	21800	67300	124000	131000	111000	48000	20900	9080	8090
MIN	3840	7950	21700	9000	15500	25600	49000	23800	12100	6650	4820	4400
CFSM	.37	.59	1.79	.58	1.51	2.20	3.11	1.73	.76	.40	.24	.19
IN.	.43	.66	2.06	.67	1.63	2.54	3.47	2.00	.85	.46	.28	.21

CAL YR 1983 TOTAL 11797550 MEAN 32320 MAX 171000 MIN 3810 CFSM 1.13 IN 15.33
WTR YR 1984 TOTAL 11734840 MEAN 32060 MAX 131000 MIN 3840 CFSM 1.12 IN 15.24

03378000 BONPAS CREEK AT BROWNS, IL

LOCATION.--Lat 38°23'11", long 87°58'32", in NW¼SE¼ sec.33, T.1 S., R.14 W., Wabash County, Hydrologic Unit 05120113, on right bank at downstream side of bridge on State Highway 15, 0.5 mi north of Browns, 0.7 mi upstream from Southern Railway bridge, and at mile 14.6.

DRAINAGE AREA.--228 mi².

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 372.92 ft National Geodetic Vertical Datum of 1929. Prior to Dec. 11, 1968, water-stage recorder and concrete dam at site 0.4 mi downstream at datum 2.0 ft higher. Dec. 11, 1968, to Aug. 13, 1969, nonrecording gage at site 0.5 mi downstream at datum 1.0 ft lower. Prior to Oct. 1, 1982, auxiliary nonrecording gage near mouth on Wabash River at Grayville read twice daily.

REMARKS.--Water-discharge records fair except those for perid of no gage-height record, Dec. 19 to Jan. 24, which are poor.

AVERAGE DISCHARGE.--44 years, 229 ft³/s, 13.64 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,500 ft³/s May 9, 1961, gage height, 24.04 ft, site and datum then in use; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,540 ft³/s Apr. 23, gage height, 18.91 ft; no flow for several days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.66	10	1960	11	240	126	600	200	15	.16	.57	2.3
2	.46	9.7	1340	10	555	182	300	130	10	.13	.40	1.0
3	.34	9.2	735	10	942	484	200	250	8.0	.21	.28	.57
4	16	9.4	1090	11	822	895	900	800	5.8	.93	8.8	.40
5	609	8.8	1180	15	500	1720	1410	1000	5.3	28	6.4	.25
6	619	8.6	1430	20	200	1750	1510	900	4.6	28	1.5	.10
7	175	7.9	1330	30	100	1500	1270	1000	3.9	29	.76	.01
8	20	8.8	1020	50	80	1170	600	1130	3.4	11	.40	.00
9	8.4	7.6	384	120	200	400	248	1030	2.9	6.1	.23	.00
10	5.2	9.5	119	200	679	103	364	421	2.6	3.7	.14	.01
11	3.8	18	863	150	938	83	234	107	2.4	2.2	.07	.18
12	3.4	19	1430	80	1080	71	382	81	2.1	1.2	19	.11
13	3.2	20	1490	40	1460	126	735	207	1.8	.93	17	.52
14	2.6	19	1670	30	1350	235	315	682	1.6	.66	10	.73
15	2.0	15	1500	22	1250	360	127	869	1.6	.52	4.4	.48
16	1.8	13	1200	19	859	1430	107	864	1.4	.44	2.1	2.9
17	1.9	12	671	16	260	1340	280	244	1.0	.34	.80	1.4
18	1.9	13	116	14	138	1350	193	94	.87	.26	3.0	.45
19	2.7	13	65	12	174	1460	107	50	.87	.16	5.7	.22
20	542	24	50	11	126	2350	78	40	.87	.13	5.5	.13
21	1110	57	40	10	87	2470	1770	30	2.8	.10	5.4	.07
22	1720	52	35	9.0	71	2360	3300	25	2.7	.07	3.3	.07
23	1890	510	30	11	62	1930	3520	150	3.3	.03	2.3	4.7
24	1670	975	25	25	63	1410	3160	80	1.5	.01	1.9	13
25	1260	1110	22	167	264	1480	2200	50	.76	.00	1.5	3.1
26	589	1070	20	380	177	1270	1200	30	.52	.00	.93	9.8
27	80	1480	18	391	109	1290	700	50	.40	.09	.87	9.0
28	25	2350	16	246	77	1720	450	90	.34	5.8	.87	10
29	18	2790	14	134	91	2220	300	50	.28	10	16	7.2
30	14	2510	13	221	---	2000	400	30	.23	1.6	30	3.4
31	12	---	12	259	---	1200	---	20	---	.87	8.4	---
TOTAL	10407.36	13159.5	19988	2724.0	12954	36575	26960	10704	88.84	132.64	158.52	72.10
MEAN	336	439	645	87.9	447	1180	899	345	2.96	4.28	5.11	2.40
MAX	1890	2790	1960	391	1460	2470	3520	1130	15	29	30	13
MIN	.34	7.6	12	9.0	62	71	78	20	.23	.00	.07	.00
CFSM	1.47	1.93	2.83	.39	1.96	5.18	3.94	1.51	.01	.02	.02	.01
IN.	1.70	2.15	3.26	.44	2.11	5.97	4.40	1.75	.01	.02	.03	.01

CAL YR 1983 TOTAL 156606.38 MEAN 429 MAX 5910 MIN .00 CFSM 1.88 IN 25.55
WTR YR 1984 TOTAL 133923.96 MEAN 366 MAX 3520 MIN .00 CFSM 1.61 IN 21.85

03378500 WABASH RIVER AT NEW HARMONY, IN
(National stream-quality accounting network station)

LOCATION.--Lat 38°07'55", long 87°56'25", in SE¼SE¼ sec.35, T.4 S., R.14 W., Posey County, Hydrologic Unit 05120113, at bridge on U.S. Highway 460 at New Harmony, at Indiana-Illinois State Line, and at mile 51.5 (82.9 km).

DRAINAGE AREA.--29,234 mi^2 (75,716 km^2). Flood of March 1913 reached a stage of 27.7 ft (8.44 m). Flood of Jan. 31, 1937, reached a stage of 24.4 ft (7.44 m).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL ANALYSES: October 1974 to current year.
WATER TEMPERATURE: October 1974 to September 1980.
SEDIMENT DISCHARGE: October 1974 to current year, (partial-record station).
WATER DISCHARGE: October 1938 to September 1947.

REMARKS.--Water discharge obtained from station Wabash River at Mount Carmel, Ill. (See sta 03377500). Code 80010-U.S. Geological Survey; code 17002-Illinois Environmental Protection Agency.

EXTREMES FOR PERIOD OF RECORD.--
WATER DISCHARGE: Maximum, 339,000 ft^3/s (9,600 m^3/s) May 26, 1943, gage height, 23.84 ft (7.266 m); minimum daily discharge, 1,800 ft^3/s (51.0 m^3/s) Sept. 29, 30, 1941.
SPECIFIC CONDUCTANCE: Maximum conductance, 805 micromhos Feb. 15, 1977; minimum, 200 micromhos Mar. 3, 1979.
WATER TEMPERATURE: Maximum, 32.0°C June 28, 1978, July 14-18, 1980; minimum, freezing point on many days during winter periods.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER)	AGENCY ANALYZING SAMPLE (CODE NUMBER)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L)
NOV.												
08...	1000	17002	17002	--	559	8.3	13.0	12.0	--	9.6	--	16
08...	1130	1028	80010	8390	559	8.3	--	12.0	19	9.6	760	--
FEB												
08...	1020	1028	80010	27900	428	7.8	1.0	.5	60	--	786	--
MAY												
02...	1000	1028	80010	102000	365	7.6	13.0	16.5	45	8.8	751	--
02...	1010	17002	17002	--	365	7.6	13.0	16.5	--	8.8	--	18
JUL												
25...	1035	1028	80010	6900	518	7.7	28.5	28.5	1.2	11.4	759	--

DATE	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	ACIDITY TOTAL HEATED (MG/L AS CACO3)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K)	POTASSIUM, DISSOLVED (MG/L AS K)
NOV												
08...	250	--	--	.00	73	67	24	22	26	26	3.7	3.5
08...	--	--	K110	--	--	63	--	21	--	22	--	3.2
FEB												
08...	--	1100	4700	--	--	51	--	16	--	20	--	3.9
MAY												
02...	--	300	K65	--	--	47	--	14	--	7.7	--	2.2
02...	<10	--	--	.00	73	71	27	26	9.0	9.3	2.9	2.6
JUL												
25...	--	<1	K1800	--	--	48	--	25	--	22	--	2.5

DATE	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, TOTAL (MG/L AS F)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	SOLIDS, VOLATILE, SUSPENDED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
NOV												
08...	160	75	29	.2	--	--	--	60	9	1.9	--	.130
08...	175	76	30	--	.40	6.1	351	--	--	--	1.9	--
FEB												
08...	133	59	32	--	.20	6.3	338	--	--	--	3.2	--
MAY												
02...	120	47	--	--	.20	5.8	288	--	--	--	3.7	--
02...	99	46	14	.1	--	--	--	96	12	3.5	--	<.100
JUL												
25...	--	68	34	--	.20	.1	368	--	--	--	.95	--

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	AMMONIA UN-IONIZED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS TOTAL (MG/L AS PO4)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AS)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)
NOV												
08...	--	.006	1.0	.140	--	.130	--	850	100	1	--	0
08...	<.010	--	.50	.180	.55	.080	.050	--	10	--	1	--
FEB												
08...	.500	--	1.9	.330	1.0	.120	.020	--	10	--	1	--
MAY												
02...	.010	<.001	1.9	<.010	--	.040	<.101	--	<10	--	1	--
02...	--	--	.90	.160	--	.090	--	2000	450	1	--	0
JUL												
25...	.030	--	1.20	.150	--	.020	.010	--	30	--	1	--

DATE	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BERYLLIUM, DISSOLVED (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
NOV												
08...	56	<0	<2.0	100	100	<3	<3	<5	<5	<5	<5	<5
08...	76	--	<.5	--	--	--	<1	--	9	00	<3	--
FEB												
08...	58	--	<.5	--	--	--	<1	--	3	--	<3	--
MAY												
02...	56	--	<1.0	--	--	--	<1	--	<6	--	<3	--
02...	45	<0	<.5	<50	<50	<3	<3	<5	<5	<5	<5	9
JUL												
25...	65	--	1.0	--	--	--	<1	--	4	--	<3	--

DATE	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)
NOV												
08...	<5	1400	<50	<50	<50	--	160	<5	<.1	--	--	<5
08...	4	--	15	--	4	5	--	5	--	.4	<10	--
FEB												
08...	<10	--	55	--	<100	6	--	20	--	.4	<10	--
MAY												
02...	<3	--	19	--	<3	8	--	3	--	.4	<10	--
02...	<5	2600	580	<50	<50	--	120	27	<.1	--	--	<5
JUL												
25...	3	--	7	--	1	4	--	1	--	.5	<10	--

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03378500 WABASH RIVER AT NEW HARMONY, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, TOTAL (UG/L AS V)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS TOTAL (UG/L)
NOV												
08...	<5	—	<3	<3	280	260	<5	<5	<50	<50	<.00	<5
08...	4	<1	—	<1	—	270	—	<6	—	5	—	—
FEB												
08...	<100	<1	—	81	—	170	—	<6	—	11	—	—
MAY												
02...	<2	<1	—	<1	—	130	—	<6	—	<9	—	—
02...	<5	—	<3	<3	130	130	8	<5	<50	<50	<.10	<5
JUL												
25...	3	<1	—	1	—	230	—	<6	—	-5	—	—

DATE	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV				
08...	1	—	—	—
08...	—	56	1270	—
FEB				
08...	—	179	13500	92
MAY				
02...	—	119	32800	78
02...	—	—	—	—
JUL				
25...	—	40	745	98

03378550 BIG CREEK NEAR WADESVILLE, IN

LOCATION.--Lat 38°04'58", long 87°46'10", in SW¼SW¼ sec.16, T.5 S., R.12 W., Posey County, Hydrologic Unit 05120113, on left bank at downstream side of bridge on State Highway 66, 0.6 mile northwest of Blairsville, and 1.6 miles southeast of Wadesville.

DRAINAGE AREA.--104 mi².

PERIOD OF RECORD.--July 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 370.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--19 years, 116 ft³/s, 15.19 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,880 ft³/s May 1, 1983; maximum gage height, 19.72 ft Apr. 24, 1975; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,400 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 20	0600	*4910	*17.78	Apr. 21	1400	2850	16.75
Mar. 25	0400	3460	17.13	Apr. 22	0400	4280	17.52
Mar. 28	1600	4010	17.40				

Minimum daily discharge, no flow Oct. 1-3, Aug. 1-11, 16, 17, Sept. 21, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.36	9.9	4.2	32	47	68	54	11	5.4	.00	.23
2	.00	.39	9.3	10	62	58	56	43	9.6	4.0	.00	.17
3	.00	.39	18	43	278	150	179	81	8.1	2.4	.00	.15
4	.02	.41	88	74	75	423	906	634	7.2	3.0	.00	.12
5	15	.30	36	118	32	1220	865	125	6.7	91	.00	.14
6	24	.25	125	101	22	269	209	93	5.9	14	.00	.10
7	6.7	.26	53	60	11	121	113	492	5.1	5.1	.00	.06
8	2.3	.21	22	33	10	94	77	504	4.6	3.0	.00	.03
9	1.1	.21	16	24	12	71	175	137	4.1	3.8	.00	.04
10	.61	.61	13	27	170	58	177	70	3.6	2.2	.00	.04
11	.31	.95	162	12	350	53	105	50	3.2	1.6	.00	.35
12	.27	.84	313	8.0	192	46	282	36	76	1.2	1.2	.37
13	.31	.73	60	6.1	430	72	407	83	6.2	1.1	.74	.28
14	.23	.75	239	5.5	132	76	175	66	3.6	.93	.17	.18
15	.15	.66	134	4.9	80	114	121	33	2.8	.90	.03	.20
16	.08	.63	39	4.6	62	1330	113	26	2.4	.91	.00	.13
17	.08	.45	25	4.3	52	272	240	22	2.1	.86	.00	.04
18	.23	.38	19	4.0	44	222	112	20	27	.69	68	.04
19	.38	.51	16	3.7	52	826	66	18	41	.55	20	.03
20	9.6	2.2	12	3.5	40	3240	50	16	70	.47	3.6	.03
21	39	3.1	11	3.3	33	558	1300	16	716	.40	1.5	.00
22	18	6.4	60	3.1	31	349	2560	14	619	.25	40	.00
23	8.9	361	33	3.0	28	151	551	18	124	.16	14	254
24	4.9	271	12	170	28	288	250	13	26	.10	2.6	440
25	2.5	19	5.8	551	51	1710	134	11	14	.04	1.1	278
26	1.6	7.8	5.0	363	41	272	217	234	9.3	.02	.86	144
27	1.1	522	4.8	186	37	271	276	37	6.6	.08	.63	9.5
28	.85	635	6.0	35	39	1700	111	27	4.9	.31	.50	2.8
29	.70	39	4.5	24	36	688	67	19	3.9	.73	.94	1.4
30	.54	16	4.0	96	---	160	171	15	3.0	.23	.53	.95
31	.40	---	3.8	29	---	100	---	13	---	.05	.34	---
TOTAL	139.86	1891.79	1559.1	2034.2	2464	15009	10133	3020	1826.9	145.48	156.74	1133.38
MEAN	4.51	63.1	50.3	65.6	85.0	484	338	97.4	60.9	4.69	5.06	37.8
MAX	39	635	313	551	430	3240	2560	634	716	91	68	440
MIN	.00	.21	3.8	3.0	10	46	50	11	2.1	.02	.00	.00
CFSM	.04	.61	.48	.63	.82	4.65	3.25	.94	.59	.05	.05	.36
IN.	.05	.68	.56	.73	.88	5.37	3.62	1.08	.65	.05	.06	.41

CAL YR 1983 TOTAL 52011.59 MEAN 142 MAX 5870 MIN .00 CFSM 1.37 IN 18.60
WTR YR 1984 TOTAL 39513.45 MEAN 108 MAX 3240 MIN .00 CFSM 1.04 IN 14.13

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03381500 LITTLE WABASH RIVER AT CARMI, IL

LOCATION.--Lat 38°03'40", long 88°09'35", near center of E½ sec.25, T.5 S., R.9 E., White County, Hydrologic Unit 05120114, on right bank at upstream side of Possum Bridge, 2.3 mi south of Main Street Bridge in Carmi, 7.8 mi downstream from Skillet Fork, and at mile 30.5.

DRAINAGE AREA.--3,102 mi².

PERIOD OF RECORD.--October 1908 to December 1912 (gage heights only), October 1939 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 339.91 ft National Geodetic Vertical Datum of 1929. Prior to December 1912, nonrecording gage at site 3.1 mi upstream at datum 0.4 ft higher. Oct. 1 to Nov. 9, 1939, nonrecording gage at present site and datum. Since Nov. 14, 1939, auxiliary water-stage recorder 3.1 mi upstream.

REMARKS.--Records fair except those for winter periods, which are poor. There was no diversion through McHenry Slough during the year.

AVERAGE DISCHARGE.--45 years, 2,568 ft³/s, 11.24 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,900 ft³/s May 12, 1961; maximum gage height, 36.70 ft May 13, 1961; no flow Sept. 16-17, 1952, result of temporary dam upstream; minimum unregulated discharge, 0.6 ft³/s Sept. 9, 1953, July 31, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18,600 ft³/s Apr. 29, maximum gage height, 31.62 ft Apr. 29; minimum daily discharge, 26 ft³/s Sept. 7-9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	2650	13000	370	2410	3390	14800	17600	1170	133	69	32
2	42	1210	12600	350	2320	2660	14700	16600	857	117	88	30
3	41	577	12700	340	3390	3510	14400	15900	609	100	74	30
4	81	424	13000	400	3880	5240	14500	15300	470	91	64	30
5	652	405	13300	650	3850	7960	14200	14700	393	129	63	30
6	596	455	13600	988	3350	9270	13700	14000	349	152	106	29
7	330	429	13800	1420	3440	9420	13200	13500	325	168	136	26
8	197	257	13700	1820	3220	9520	12600	13100	297	131	100	26
9	120	207	13500	2400	3240	9460	12200	12700	255	123	78	26
10	94	214	13200	2810	4160	9100	11700	11900	250	128	88	35
11	93	538	12900	2650	5750	8420	11100	11000	240	115	85	97
12	91	1330	14000	2480	6430	7450	10500	10100	245	98	85	206
13	92	1090	15000	2670	8000	6480	10000	9120	221	84	84	272
14	302	743	15500	2150	9200	5640	9030	7440	208	74	114	178
15	252	591	16000	1590	9640	5160	7940	5830	204	79	136	127
16	168	585	16000	1120	10000	7330	6590	4740	403	150	114	114
17	136	492	14000	807	10500	7760	5250	3960	329	106	105	127
18	137	391	11000	575	10800	7800	3930	3670	240	72	91	338
19	97	315	9000	450	11000	8690	2560	3840	236	69	88	696
20	208	566	7000	400	10900	10500	1700	3960	159	70	77	717
21	1500	1500	5000	350	10600	11100	5100	4080	193	69	74	499
22	3000	3000	3500	300	10300	11400	10200	4010	200	67	118	306
23	5500	4500	2500	250	9730	11600	11400	3680	212	65	162	592
24	6590	6000	1500	300	9150	11900	12600	2920	195	61	78	393
25	6970	7000	1000	993	8590	12400	13900	2390	157	60	55	782
26	7250	7500	800	2900	7730	12400	15400	2400	150	58	45	1160
27	6880	9000	650	3770	6870	12400	16900	2140	189	58	38	1870
28	5910	11000	550	3570	6050	12900	18200	1770	191	60	40	2460
29	5070	13000	500	3070	4760	13900	18500	1720	166	71	40	2490
30	4410	14000	450	3040	---	14200	18100	1660	144	69	38	2410
31	3480	---	400	2720	---	14700	---	1500	---	58	35	---
TOTAL	60333	89969	279650	47703	199220	283660	344900	237230	9257	2885	2566	16320
MEAN	1946	2999	9021	1539	6870	9150	11500	7653	309	93.1	82.8	544
MAX	7250	14000	16000	3770	11000	14700	18500	17600	1170	168	162	2490
MIN	41	207	400	250	2320	2660	1700	1500	144	58	35	26
CFSM	.63	.97	2.91	.50	2.21	2.95	3.71	2.47	.10	.03	.03	.18
IN.	.72	1.08	3.35	.57	2.39	3.40	4.14	2.84	.11	.03	.03	.20

CAL YR 1983 TOTAL 1733139 MEAN 4748 MAX 20600 MIN 41 CFSM 1.53 IN 20.78
WTR YR 1984 TOTAL 1573701 MEAN 4300 MAX 18500 MIN 26 CFSM 1.39 IN 18.87

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04093000 DEEP RIVER AT LAKE GEORGE OUTLET AT HOBART , IN

LOCATION.--Lat 41°32'10", long 87°15'25", in NW¼NW¼ sec.32, T.36 N., R.7 W., Lake County, Hydrologic Unit 04040001, on left bank at upstream side of bridge on Center Street in Hobart, 300 ft upstream from Duck Creek, and 400 ft downstream from Lake George Dam.

DRAINAGE AREA.--124 mi^2.

PERIOD OF RECORD.--April 1947 to current year.

REVISED RECORDS.--WSP 1337: 1953. WSP 1507: 1956. WDR IN-72-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 588.17 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to July 29, 1952, nonrecording gage, and July 30, 1952, to July 20, 1955, water-stage recorder at site 400 ft upstream at datum 11.80 ft higher.

REMARKS.--Records fair. Unusual regulation by Lake George Dam.

AVERAGE DISCHARGE.--37 years, 109 ft^3/s, 11.94 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,000 ft^3/s June 14, 1981; maximum gage height, 19.48 ft, Oct. 11, 1954, present datum, site then in use; no flow Nov. 5, 1978, due to regulation of Lake George Dam.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 13	2400	998	9.63	May 23	2300	*1090	*10.00
Mar. 17	0500	861	9.03	May 29	2000	893	9.17
Mar. 21	1100	1010	9.69				

Minimum daily discharge, 5.0 ft^3/s May 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	22	166	35	24	78	218	139	393	38	21	21
2	16	25	122	34	24	85	183	123	293	35	20	32
3	15	26	100	35	27	87	171	119	224	35	21	37
4	13	26	94	38	32	90	232	139	175	33	24	34
5	14	25	94	40	35	89	252	155	143	33	26	29
6	14	24	142	40	39	80	222	137	121	31	24	26
7	15	22	212	38	41	74	184	124	89	31	20	23
8	14	22	176	36	40	70	153	117	78	29	20	19
9	15	21	138	35	39	63	137	114	127	27	21	22
10	17	25	114	34	43	61	124	111	234	27	42	23
11	18	43	155	31	48	60	117	40	198	80	57	32
12	40	45	539	29	279	54	120	5.0	139	132	43	26
13	52	38	641	28	831	54	164	31	124	98	32	22
14	42	31	510	28	931	54	200	61	116	67	25	28
15	29	31	491	27	702	71	229	58	99	48	21	38
16	25	51	422	26	525	624	454	56	98	38	18	33
17	20	61	295	26	417	817	658	54	131	33	21	26
18	18	52	206	24	345	604	626	51	103	27	20	21
19	17	52	158	23	324	439	512	47	75	26	19	18
20	22	63	132	23	304	660	390	103	52	25	17	16
21	36	61	123	22	258	986	295	151	52	23	17	15
22	52	53	110	22	215	850	335	224	119	24	16	16
23	62	75	85	23	177	677	641	912	199	23	13	34
24	55	115	70	23	152	649	611	981	144	26	15	52
25	44	99	51	23	134	599	450	706	97	42	16	44
26	30	73	45	24	116	592	334	540	75	40	16	37
27	25	72	43	25	101	567	257	440	61	38	17	33
28	24	261	47	27	98	496	208	465	44	32	23	26
29	18	368	44	26	82	415	168	842	39	27	22	22
30	20	258	39	25	---	330	175	793	39	24	17	20
31	20	---	36	24	---	263	---	566	---	22	15	---
TOTAL	818	2140	5600	894	6383	10638	8820	8404.0	3881	1214	699	831
MEAN	26.4	71.3	181	28.8	220	343	294	271	129	39.2	22.5	27.7
MAX	62	368	641	40	931	986	658	981	393	132	57	52
MIN	13	21	36	22	24	54	117	5.0	39	22	13	15
CFSM	.21	.58	1.46	.23	1.77	2.77	2.37	2.19	1.04	.32	.18	.22
IN.	.25	.64	1.68	.27	1.91	3.19	2.65	2.52	1.16	.36	.21	.25

CAL YR 1983 TOTAL 55387.0 MEAN 152 MAX 2670 MIN 11 CFSM 1.23 IN 16.62
WTR YR 1984 TOTAL 50322.0 MEAN 137 MAX 986 MIN 5.0 CFSM 1.11 IN 15.10

04093500 BURNS DITCH AT GARY, IN

LOCATION.--Lat 41°34'30", long 87°17'20", in SE¼NW¼ sec.13, T.36 N., R.8 W., Lake County, Hydrologic Unit 04040001, on left bank at downstream side of bridge on Central Avenue, 0.4 mile east of Gary, and 0.4 mile downstream from confluence of Deep River and Little Calumet River.

DRAINAGE AREA.--160 mi². During times of floods flow may leave the basin by flowing west through Little Calumet River into the western portion of Calumet River basin; or during times of floods on Hart ditch, flow may enter the basin from western portion of the Little Calumet River basin.

PERIOD OF RECORD.--October 1943 to current year (Since 1951 water year, backwater free periods only).

REVISED RECORDS.--WSP 1034: 1944. WSP 1337: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 577.04 ft National Geodetic Vertical Datum of 1929. Prior to July 28, 1955, nonrecording gage at same site and datum.

REMARKS.--Records fair. Burns ditch is an artificial channel which reverses the direction of flow of part of Little Calumet River and flows into Lake Michigan at Ogden Dunes. During high levels on Lake Michigan, only periods free from backwater are shown.

AVERAGE DISCHARGE.--28 years (1943-53, 1955-73, 1977, 1978, 1982), 140 ft³/s, 11.88 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,430 ft³/s Oct. 11, 1954; maximum gage height, 16.44 ft Mar. 16, 1944, from graph based on gage readings.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,250 ft³/s Mar. 22, gage height, 10.48 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	230		---	95	322	188	656			
2		---	167		---	93	267	176	505			
3		---	141		---	94	260	197	382			
4		---	140		---	99	327	218	283			
5		---	130		---	101	356	199	226			
6		---	246		---	102	321	193	187			
7		---	269		---	87	266	173	159			
8		---	234		---	83	224	158	120			
9		---	188		---	82	203	153	169			
10		---	163		---	74	181	146	265			
11		---	217		152	74	158	126	269			
12		---	530		375	74	168	85	204			
13		---	720		892	64	221	101	162			
14		---	663		1130	64	272	106	148			
15		---	591		952	82	327	89	132			
16		---	547		737	731	545	82	126			
17		89	436		590	991	760	77	191			
18		66	---		494	878	803	73	142			
19		79	---		447	683	712	70	97			
20		81	---		413	816	582	154	60			
21		68	---		393	1160	469	194	58			
22		62	---		288	1200	485	318	201			
23		85	---		238	1010	733	872	273			
24		115	---		209	915	779	1190	225			
25		99	---		175	857	628	1040	148			
26		86	---		149	802	482	845	102			
27		134	---		130	773	380	701	80			
28		313	---		122	718	294	733	58			
29		415	---		105	623	249	983	53			
30		345	---		---	501	228	1070	51			
31		---	---		---	401	---	881	---			
TOTAL		---	---		---	14327	12002	11591	5732			
MEAN		---	---		---	462	400	374	191			
MAX		---	---		---	1200	803	1190	656			
MIN		---	---		---	64	158	70	51			
CFSM		---	---		---	2.89	2.50	2.34	1.19			
IN.		---	---		---	3.33	2.79	2.69	1.33			

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04094000 LITTLE CALUMET RIVER AT PORTER, IN

LOCATION.--Lat 41°37'18", long 87°05'13", in NE¼NE¼ sec.34, T.37 N., R.6 W., Porter County, Hydrologic Unit 04040001, on right bank at downstream end of county road bridge, 200 ft upstream from bridge on U.S. Highway 20, 0.8 mile northwest of Porter, and 4.5 miles upstream from Salt Creek.

DRAINAGE AREA.--66.2 mi².

PERIOD OF RECORD.--May 1945 to current year.

REVISED RECORDS.--WSP 1084: 1945. WSP 1337: 1946-47. WDR IN-72-1: Drainage area. WDR IN-83-1: 1982.

GAGE.--Water-stage recorder. Datum of gage is 603.48 ft National Geodetic Vertical Datum of 1929. Prior to June 26, 1952, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--39 years, 74.3 ft³/s, 15.24 in/yr.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,110 ft³/s Oct. 10, 1954, gage height, 11.66 ft; minimum daily, 17 ft³/s Aug. 24, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 13	1500	784	7.72	May 23	1700	863	7.88
Mar. 16	1800	*1000	*8.14				

Minimum daily discharge, 27 ft³/s Aug. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	50	71	47	45	62	69	74	107	47	31	29
2	36	55	63	48	47	64	66	69	88	45	31	32
3	36	60	60	50	48	63	73	68	77	44	32	38
4	37	56	62	53	48	63	146	99	67	44	31	32
5	39	54	66	55	50	61	127	103	62	44	28	32
6	38	55	94	56	53	59	101	85	57	43	27	30
7	38	54	109	56	52	56	86	77	54	42	29	32
8	39	52	81	55	51	55	77	70	52	42	31	31
9	40	51	71	52	50	56	72	67	80	43	31	31
10	40	52	66	50	49	57	69	66	76	43	43	34
11	41	54	86	48	59	54	65	64	56	61	36	33
12	52	59	227	46	230	53	65	62	51	54	33	32
13	53	56	210	45	706	55	98	60	52	47	31	32
14	43	54	130	44	575	54	93	61	59	43	31	34
15	41	54	135	44	304	82	96	56	52	41	29	46
16	40	63	97	43	191	678	149	54	53	38	29	43
17	39	64	79	43	143	562	173	52	60	35	31	34
18	39	58	63	43	119	221	172	52	50	35	36	31
19	38	59	56	41	119	157	137	50	46	34	31	30
20	43	67	53	39	106	264	115	79	45	34	30	29
21	55	68	51	40	92	503	95	93	44	34	29	29
22	59	60	50	43	83	249	160	116	85	34	29	30
23	64	68	49	45	76	195	479	545	187	33	28	45
24	60	96	46	46	71	208	278	444	181	35	28	51
25	55	72	43	48	67	176	164	185	123	36	28	39
26	51	62	44	50	63	142	119	192	76	36	28	41
27	50	66	47	53	63	124	98	154	63	39	28	35
28	49	164	50	52	61	119	86	151	55	36	30	35
29	49	158	49	44	59	99	77	402	51	34	29	36
30	49	94	48	46	---	83	81	291	49	33	29	34
31	49	---	46	45	---	75	---	150	---	31	28	---
TOTAL	1398	2035	2402	1470	3680	4749	3686	4091	2158	1240	945	1040
MEAN	45.1	67.8	77.5	47.4	127	153	123	132	71.9	40.0	30.5	34.7
MAX	64	164	227	56	706	678	479	545	187	61	43	51
MIN	36	50	43	39	45	53	65	50	44	31	27	29
CFSM	.68	1.02	1.17	.72	1.92	2.31	1.86	1.99	1.09	.60	.46	.52
IN.	.79	1.14	1.35	.83	2.07	2.67	2.07	2.30	1.21	.70	.53	.58

CAL YR 1983 TOTAL 31546 MEAN 86.4 MAX 998 MIN 29 CFSM 1.31 IN 17.73
WTR YR 1984 TOTAL 28894 MEAN 78.9 MAX 706 MIN 27 CFSM 1.19 IN 16.24

04094500 SALT CREEK NEAR McCOOL, IN

LOCATION.--Lat 41°35'48", long 87°08'40", in SE¼SE¼ sec.6, T.36 N., R.6 W., Porter County, Hydrologic Unit 04040001, on left bank on downstream side of highway bridge, 50 ft downstream from Conrail Railroad bridge, 1.2 miles north of McCool, and 1.5 miles upstream from Little Calumet River.

DRAINAGE AREA.--74.6 mi².

PERIOD OF RECORD.--May 1945 to current year.

REVISED RECORDS.--WSP 1337: 1946-48(M), 1950(M). WSP 1911: 1958. WDR IN-72-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 594.10 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to July 25, 1955, nonrecording gage at same site and datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--39 years, 74.8 ft³/s, 13.62 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,180 ft³/s Oct. 11, 1954, gage height, 14.12 ft; minimum daily, 14 ft³/s Sept. 8, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 692 ft³/s May 23, gage height, 6.07 ft; minimum daily, 34 ft³/s Aug. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	63	89	58	58	69	86	80	138	65	43	36
2	44	68	82	59	58	70	82	76	96	63	42	39
3	42	69	80	61	60	72	89	76	85	61	43	44
4	47	66	82	63	60	72	163	116	78	61	43	41
5	55	65	85	64	63	70	125	105	73	61	42	43
6	63	64	115	63	66	69	103	86	71	61	44	39
7	64	63	119	62	65	67	90	80	68	61	46	39
8	62	63	100	61	64	66	84	76	66	57	44	38
9	62	64	92	59	62	66	81	73	176	57	39	37
10	61	64	88	59	60	65	79	72	123	57	46	63
11	60	68	113	57	71	66	76	70	91	84	46	51
12	72	72	275	55	235	63	78	70	80	85	41	42
13	76	70	201	55	441	64	100	70	84	79	39	41
14	67	68	132	54	432	65	97	73	73	57	40	49
15	64	69	151	54	294	89	103	68	64	51	39	54
16	61	82	103	53	151	456	171	67	66	50	41	56
17	60	84	84	53	114	436	178	66	69	48	40	48
18	62	76	72	52	103	196	171	66	66	48	61	46
19	60	77	64	50	105	136	132	67	63	47	47	46
20	62	88	63	47	97	307	111	113	61	46	43	46
21	74	87	61	49	88	449	96	122	62	47	41	45
22	75	79	59	53	81	343	200	173	178	46	40	44
23	82	91	57	58	79	190	457	488	216	45	38	60
24	78	107	55	58	78	199	372	566	136	50	38	64
25	72	87	52	58	75	182	173	372	97	55	38	54
26	67	79	56	58	73	189	114	230	82	49	37	56
27	66	85	58	61	70	170	98	198	75	55	37	52
28	64	185	60	59	70	157	89	216	70	49	40	51
29	64	157	60	58	69	124	82	432	68	45	38	51
30	64	108	57	59	---	103	88	450	66	44	36	50
31	64	---	56	57	---	92	---	240	---	43	34	---
TOTAL	1958	2468	2821	1767	3342	4762	3968	5057	2741	1727	1286	1425
MEAN	63.2	82.3	91.0	57.0	115	154	132	163	91.4	55.7	41.5	47.5
MAX	82	185	275	64	441	456	457	566	216	85	61	64
MIN	42	63	52	47	58	63	76	66	61	43	34	36
CFSM	.85	1.10	1.22	.76	1.54	2.06	1.77	2.19	1.23	.75	.56	.64
IN.	.98	1.23	1.41	.88	1.67	2.37	1.98	2.52	1.37	.86	.64	.71

CAL YR 1983 TOTAL 36850 MEAN 101 MAX 1820 MIN 34 CFSM 1.35 IN 18.38
WTR YR 1984 TOTAL 33322 MEAN 91.0 MAX 556 MIN 34 CFSM 1.22 IN 16.62

04095300 TRAIL CREEK AT MICHIGAN CITY, IN

LOCATION.--Lat 41°43'00", long 86°51'35", in SW¼NE¼ sec.27, T.38 N., R.4 W., LaPorte County, Hydrologic Unit 04040001, on left downstream wingwall of bridge on Springland Avenue in Michigan City, 1.0 mile upstream from Otter Creek, and 4.2 miles upstream from mouth.

DRAINAGE AREA.--54.1 mi^2.

PERIOD OF RECORD.--June 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 584.02 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--15 years, 72.6 ft^3/s, 18.22 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,880 ft^3/s Mar. 4, 1979, gage height, 11.40 ft; minimum daily, 20 ft^3/s Aug. 1, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 13	0800	670	8.09
Mar. 16	1200	*1020	*9.97
Apr. 22	1900	535	6.95
May 23	0500	712	8.45
Jun. 23	0700	562	7.18

Minimum daily discharge, 28 ft^3/s Aug. 31.

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DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	50	63	39	39	70	78	83	85	55	35	31
2	32	54	60	41	40	70	76	80	78	51	36	32
3	31	61	58	43	44	68	99	81	73	49	36	36
4	32	54	59	45	46	68	164	138	69	51	35	31
5	36	51	62	46	46	68	113	121	65	50	36	30
6	36	50	94	46	44	67	94	100	64	48	36	30
7	36	49	90	47	43	64	85	90	62	46	45	36
8	38	48	73	46	42	64	80	84	61	43	41	31
9	38	48	70	44	41	64	78	80	74	46	40	30
10	36	48	66	42	41	63	75	79	62	47	61	32
11	38	52	105	37	49	61	72	77	56	70	42	33
12	51	56	220	33	389	60	83	73	55	53	38	32
13	50	52	116	38	592	64	160	74	74	48	37	35
14	43	51	99	42	287	64	109	73	76	46	36	36
15	40	51	98	42	161	141	120	67	61	43	34	48
16	39	59	80	41	122	793	158	67	63	43	34	37
17	38	60	68	41	113	282	138	67	62	42	33	34
18	38	53	54	40	103	162	150	66	57	41	35	34
19	39	58	47	36	111	135	121	66	54	40	33	31
20	52	64	45	30	96	360	108	111	54	40	33	30
21	71	61	43	33	88	231	95	90	53	41	32	30
22	65	55	42	36	82	183	323	204	172	39	32	30
23	60	74	41	38	78	166	341	596	423	38	31	52
24	56	72	38	39	75	174	167	188	247	38	31	39
25	53	61	34	40	73	133	123	136	100	38	30	79
26	50	52	35	40	69	112	107	203	76	43	29	65
27	49	67	39	40	67	106	98	127	70	45	30	42
28	48	169	41	40	68	103	90	165	62	40	30	40
29	47	95	42	39	67	91	85	280	58	38	29	39
30	47	71	41	37	---	83	92	137	56	37	29	38
31	47	---	40	38	---	80	---	99	---	36	28	---
TOTAL	1371	1846	2063	1239	3116	4250	3682	3902	2622	1385	1087	1123
MEAN	44.2	61.5	66.5	40.0	107	137	123	126	87.4	44.7	35.1	37.4
MAX	71	169	220	47	592	793	341	596	423	70	61	79
MIN	31	48	34	30	39	60	72	66	53	36	28	30
CFSM	.82	1.14	1.23	.74	1.98	2.53	2.27	2.33	1.62	.83	.65	.69
IN.	.94	1.27	1.42	.85	2.14	2.92	2.53	2.68	1.80	.95	.75	.77

CAL YR 1983 TOTAL 28766 MEAN 78.8 MAX 851 MIN 31 CFSM 1.46 IN 19.78
WTR YR 1984 TOTAL 27686 MEAN 75.6 MAX 793 MIN 28 CFSM 1.40 IN 19.04

04096100 GALENA RIVER NEAR LAPORTE, IN

LOCATION.--Lat 41°44'54", long 86°40'30", in SE¼NW¼ sec.17, T.38 N., R.2 W., LaPorte County, Hydrologic Unit 04040001, on left bank at downstream side of bridge on County Road 125 East, 1.3 miles upstream from Indiana-Michigan State line, and 9.8 miles north of Courthouse in LaPorte.

DRAINAGE AREA.--17.2 mi² of which 2.30 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1969 to current year.

REVISED RECORDS.--WDR IN-80-1: 1970, 1971(P), 1972, 1973, 1974(P), 1975 (M), 1976 (P), and 1978 (P).

GAGE.--Water-stage recorder. Datum of gage is 625.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--15 years, 25.5 ft³/s, 20.13 in./yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 650 ft³/s Mar. 7, 1979, gage height, 7.02 ft; minimum daily, 6.7 ft³/s Sept. 13, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 13	0200	*212	*5.49	May 23	0500	170	5.12
Mar. 16	0900	174	5.16	June 23	1100	131	4.33
Apr. 22	2100	163	4.78				

Minimum daily discharge, 10 ft³/s Aug. 30, 31, Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	17	25	21	20	23	30	24	36	21	13	11
2	11	19	23	22	22	24	29	23	32	19	13	12
3	11	23	22	22	24	25	33	22	30	18	13	13
4	12	21	24	23	25	26	54	44	28	19	13	12
5	13	19	26	24	26	27	41	40	25	19	13	11
6	13	19	37	24	26	26	36	32	23	18	13	11
7	13	19	36	24	25	26	32	28	22	17	15	13
8	14	19	31	22	24	25	30	25	22	16	18	12
9	14	18	28	23	24	24	29	24	22	17	16	11
10	14	18	28	22	25	24	29	24	23	18	21	11
11	14	21	36	21	36	23	27	24	18	22	16	12
12	16	22	64	22	101	21	28	23	17	21	15	12
13	17	20	43	22	168	22	46	21	18	18	14	13
14	14	19	38	22	89	22	39	22	24	16	13	14
15	13	19	38	22	60	34	39	19	20	16	13	19
16	13	23	33	21	49	133	47	19	19	15	13	16
17	13	23	30	21	47	68	44	18	20	14	13	13
18	13	21	26	21	42	49	49	18	17	14	13	12
19	13	23	25	20	43	46	42	17	16	14	13	11
20	14	26	24	17	40	78	38	28	15	15	12	11
21	20	24	23	19	37	67	34	30	15	15	12	11
22	20	21	22	20	38	68	91	51	21	15	12	10
23	22	26	21	20	36	59	95	128	105	13	12	15
24	20	29	20	21	33	59	54	56	54	13	12	16
25	18	23	19	21	30	49	45	47	36	13	11	47
26	18	21	20	21	28	44	40	67	28	14	11	45
27	17	23	21	21	27	42	36	44	26	16	11	24
28	17	54	22	21	26	41	29	53	23	16	11	20
29	17	37	22	21	24	37	25	76	22	15	11	19
30	17	29	22	20	---	34	26	46	21	14	10	17
31	16	---	21	19	---	31	---	41	---	13	10	---
TOTAL	468	696	870	660	1195	1277	1217	1134	798	504	406	474
MEAN	15.1	23.2	28.1	21.3	41.2	41.2	40.6	36.6	26.6	16.3	13.1	15.8
MAX	22	54	64	24	168	133	95	128	105	22	21	47
MIN	11	17	19	17	20	21	25	17	15	13	10	10
CFSM	.88	1.35	1.63	1.24	2.40	2.40	2.36	2.13	1.55	.95	.76	.92
IN.	1.01	1.51	1.88	1.43	2.58	2.76	2.63	2.45	1.73	1.09	.88	1.03

CAL YR 1983 TOTAL 9085.6 MEAN 24.9 MAX 192 MIN 9.7 CFSM 1.45 IN 19.65
WTR YR 1984 TOTAL 9699.0 MEAN 26.5 MAX 168 MIN 10 CFSM 1.54 IN 20.98

04097970 LIME LAKE OUTLET AT PANAMA, IN

LOCATION.--Lat 41°42'46", long 85°07'10", in NW¼NW¼ sec.35, T.38 N., R.12 E., Steuben County, Hydrologic Unit 04050001, on right bank 10 ft downstream from dam for Lime Lake, 30 ft upstream from bridge on Orland Road, and 0.7 mile northwest of Panama.

DRAINAGE AREA.--17.5 mi^2, of which 3.68 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 950.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Occasional regulation by control structure for Lime Lake.

AVERAGE DISCHARGE.--15 years, 7.68 ft^3/s, 5.96 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46 ft^3/s Apr. 3, 1982, gage height, 4.85 ft; no flow at times during 1971, 1972, and 1984.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 23 ft^3/s Apr. 30, gage height, 4.18 ft; minimum daily, no flow, Oct. 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	.05	12	11	7.6	10	15	17	5.3	1.2	1.6	.45
2	9.3	.06	11	11	7.5	10	15	17	6.3	1.1	1.6	.49
3	8.7	.10	11	11	7.7	10	15	16	6.7	1.1	1.6	.57
4	8.1	.10	10	11	7.7	9.9	15	16	7.1	1.1	1.6	.49
5	7.5	.10	10	11	7.7	9.7	16	16	7.3	1.1	1.6	.45
6	6.9	.15	12	11	7.7	9.7	16	16	7.5	1.1	1.6	.45
7	6.5	.19	13	10	7.5	9.6	16	16	7.5	1.0	1.5	.65
8	6.0	.19	12	10	7.5	9.5	16	14	7.5	1.0	1.5	.70
9	2.8	.22	12	10	7.4	9.3	16	14	7.3	1.1	1.5	.90
10	.19	.24	12	10	7.4	9.2	15	14	7.1	1.3	1.3	1.5
11	.15	.32	12	10	7.5	9.2	15	13	6.0	1.6	1.8	1.5
12	.09	.32	13	9.8	7.8	9.1	15	13	5.5	1.5	1.6	1.7
13	.08	.35	13	9.6	8.2	9.4	16	12	5.3	1.5	1.5	2.1
14	.06	.38	13	9.4	8.5	9.3	15	12	5.8	1.5	1.3	2.7
15	.06	.45	13	9.1	8.7	9.4	17	11	5.0	1.4	1.2	2.6
16	.05	.57	13	9.0	8.8	12	18	11	4.3	1.3	1.1	2.3
17	.05	.61	13	8.8	9.1	12	19	10	4.2	1.2	1.0	2.1
18	.04	.70	13	8.6	9.4	13	19	9.8	3.8	1.1	.90	2.0
19	.03	.90	13	8.5	9.7	13	19	9.8	3.4	1.0	.80	1.8
20	.03	1.3	12	8.3	9.8	14	18	10	3.2	.98	.65	1.7
21	.02	1.3	12	8.4	9.9	14	18	11	2.7	.93	.61	1.6
22	.02	5.8	12	8.2	10	15	19	11	2.4	.95	.49	1.5
23	.02	17	12	8.1	10	15	20	11	2.4	1.0	.45	1.5
24	.01	15	12	8.0	10	16	20	11	2.4	1.3	.38	1.5
25	.00	14	11	7.9	9.9	16	20	11	2.0	1.3	.35	2.7
26	.00	13	11	7.7	9.9	16	20	6.3	1.9	1.5	.32	3.1
27	.04	13	11	7.6	10	16	20	1.6	1.5	1.8	.32	2.7
28	.05	14	11	7.5	10	16	19	2.3	1.4	2.1	.27	2.5
29	.03	13	11	7.5	10	16	19	2.9	1.3	1.9	.29	2.2
30	.04	12	11	7.7	---	16	19	3.6	1.2	1.8	.35	2.0
31	.04	---	11	7.7	---	16	---	4.4	---	1.7	.32	---
TOTAL	66.90	125.40	368	283.4	252.9	379.3	520	343.7	135.3	40.46	31.40	48.45
MEAN	2.16	4.18	11.9	9.14	8.72	12.2	17.3	11.1	4.51	1.31	1.01	1.62
MAX	10	17	13	11	10	16	20	17	7.5	2.1	1.8	3.1
MIN	.00	.05	10	7.5	7.4	9.1	15	1.6	1.2	.93	.27	.45
CFSM	.12	.24	.68	.52	.50	.70	.99	.63	.26	.08	.06	.09
IN.	.14	.27	.78	.60	.54	.81	1.11	.73	.29	.09	.07	.10

CAL YR 1983 TOTAL 3479.27 MEAN 9.53 MAX 33 MIN .00 CFSM .55 IN 7.40
WTR YR 1984 TOTAL 2595.21 MEAN 7.09 MAX 20 MIN .00 CFSM .41 IN 5.52

04099000 ST. JOSEPH RIVER AT MOTTVILLE, MI

LOCATION.--41°48'03", long 85°45'22", in SW¼ sec.6, T.8 S., R.12 W., Michigan Meridian, St. Joseph County, Hydrologic Unit 04050001, on right bank 500 ft upstream from bridge on U.S. Highway 12 at Mottville, 0.4 mi downstream from Michigan Power Co. hydroelectric plant, 4 mi upstream from Pigeon River, and at mile 96.

DRAINAGE AREA.--1,866 mi².

PERIOD OF RECORD.--October 1923 to current year. Monthly discharge only for some periods, published in WSP 1307.

REVISED RECORDS.--WSP 1387: 1930, 1932, 1938, 1940-42, 1945. WSP 1911: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 755.3 ft Michigan Power Co. datum. Prior to Oct. 1, 1951, at site 0.4 mi upstream at datum 4.2 ft higher.

REMARKS.--Records good except those for the winter period, which are fair. Flow regulated by powerplants above station. Several observations of water temperature were made during the year. National Weather Service gage-height telemark at station.

AVERAGE DISCHARGE.--61 years, 1,585 ft³/s, 11.53 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,700 ft³/s Apr. 27, 1950, gage height, 10.76 ft, present datum; minimum daily, 39 ft³/s Oct. 19, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,230 ft³/s Mar. 21, gage height, 5.94 ft; maximum gage height, 6.22 ft Dec. 27, backwater from ice; minimum discharge, 310 ft³/s Aug. 24, gage height, 1.74 ft; minimum daily, 319 ft³/s Aug. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	706	1040	1740	1800	1300	1900	2810	2580	3640	816	768	510
2	721	858	1760	1700	1250	1920	2610	2430	3460	1240	685	507
3	1050	906	1710	1800	1300	1910	2580	2360	2970	906	746	514
4	953	953	1640	1900	1350	1880	2570	2340	2870	727	541	770
5	967	958	1600	1800	1400	1790	2470	2300	2740	941	542	863
6	879	1020	1520	1700	1500	1800	2510	2080	2540	949	907	746
7	744	1320	1720	1700	1500	1830	2480	2240	2540	718	962	638
8	770	1120	1690	1600	1400	1800	2460	2170	2260	758	910	550
9	735	1060	1680	1700	1450	1570	2370	2080	2330	1010	841	553
10	755	1450	1750	1800	1550	1340	2370	1940	2230	1210	805	940
11	766	876	1760	1700	1650	1410	2320	1960	2110	1020	518	904
12	1020	869	1840	1500	1680	1730	2210	1810	2070	1020	515	626
13	954	864	1990	1700	1960	1600	2260	1820	1960	1100	568	662
14	961	1060	2100	1500	2620	1380	2300	1960	1810	720	607	1010
15	820	1100	2160	1400	3240	1460	2570	1930	1800	765	579	880
16	876	1300	2220	1400	3320	2000	2850	1900	1740	1040	496	957
17	936	1100	2250	1600	3210	2380	2990	1890	1470	999	508	1110
18	1190	1140	2250	1500	3540	2950	3090	1650	1600	747	521	807
19	1120	837	1990	1400	3010	3640	3290	1490	1750	746	516	1000
20	878	1030	1870	1300	3230	3600	3310	1920	1350	735	500	810
21	851	1490	1790	1200	3050	3950	3360	2020	1420	646	491	843
22	873	1610	1850	1200	2660	3710	3370	2210	1270	587	487	675
23	950	1480	1700	1300	2800	3990	3230	2460	1260	529	474	594
24	1200	1270	1600	1500	2690	3770	3080	2550	1180	580	374	850
25	1360	1260	1500	1400	2460	3870	3120	2840	1510	820	319	1100
26	1330	1370	1500	1300	2350	3520	3090	3620	1380	756	329	1000
27	1310	1420	1600	1300	2350	3430	2970	3710	1080	747	348	1050
28	1320	1520	1800	1250	2320	3290	2750	3830	1110	561	355	1090
29	1210	1620	1850	1150	2060	3160	2610	3900	1250	665	482	828
30	901	1620	1800	1200	---	2900	2540	3880	1110	1270	505	897
31	1230	---	1900	1500	---	2870	---	3810	---	830	500	---
TOTAL	30336	35521	56130	46800	64200	78350	82540	75680	57810	26158	17697	24284
MEAN	979	1184	1811	1510	2214	2527	2751	2441	1927	844	571	809
MAX	1360	1620	2250	1900	3540	3990	3370	3900	3640	1270	962	1110
MIN	706	837	1500	1150	1250	1340	2210	1490	1080	529	319	507
CFSM	.53	.64	.97	.81	1.19	1.35	1.47	1.31	1.03	.45	.31	.43
IN.	.60	.71	1.12	.93	1.28	1.56	1.65	1.51	1.15	.52	.35	.48

CAL YR 1983 TOTAL 708667 MEAN 1942 MAX 5220 MIN 557 CFSM 1.04 IN 14.13
WTR YR 1984 TOTAL 595506 MEAN 1627 MAX 3990 MIN 319 CFSM .87 IN 11.87

04099510 PIGEON CREEK NEAR ANGOLA, IN

LOCATION.--Lat 41°38'04", long 85°06'35", in NW¼SE¼ sec.26, T.37 N., R.12 E., Steuben County, Hydrologic Unit 04050001, on left bank 5 ft upstream from bridge on U.S. Highway 20, 1.3 miles downstream from outlet of Hogback Lake, 1.3 miles southeast of Flint, and 5.8 miles west of Angola.

DRAINAGE AREA.--106 mi^2, of which 22.5 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1945 to current year. Prior to October 1947, published as "near Flint". Published as Pigeon Creek at Hogback Lake Outlet near Angola, October 1947 to September 1971, and Pigeon Creek and Hogback Lake near Angola, October 1971 to September 1974.

REVISED RECORDS.--WSP 1144: 1948. WSP 2111: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 940.00 ft National Geodetic Vertical Datum of 1929. Prior to October 1947, nonrecording gage at site 0.3 mile downstream at different datum. October 1947 to Aug. 3, 1953, nonrecording gage at site 1.2 miles upstream at same datum. Aug. 4, 1953, to Apr. 3, 1974, recording gage at site 1.3 miles upstream at same datum. Apr. 18, 1974, to Sept. 2, 1974, non-recording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--39 years, 78.9 ft^3/s, 10.10 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 795 ft^3/s Mar. 22, 1982, gage height, 13.90 ft; minimum daily, 3.4 ft^3/s Oct. 25-27, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 369 ft^3/s Mar. 22, gage height, 9.79 ft; minimum daily, 11 ft^3/s Aug. 28-30 (regulation).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	29	70	54	38	123	196	178	240	43	31	16
2	23	29	69	52	38	118	183	168	215	42	30	20
3	23	29	66	52	38	112	172	159	199	41	30	25
4	23	28	64	51	40	107	166	151	182	41	31	28
5	23	27	62	50	40	103	166	146	161	40	33	28
6	23	27	69	49	41	101	183	142	146	41	34	28
7	23	26	88	49	41	102	199	135	136	40	36	30
8	22	26	107	48	41	100	206	130	127	40	40	30
9	23	25	115	48	40	97	200	125	118	40	41	33
10	22	25	119	47	41	94	190	121	111	41	40	35
11	22	25	118	46	43	91	177	118	104	43	37	36
12	23	25	131	45	49	89	166	114	100	42	35	37
13	25	25	166	44	96	89	162	111	98	41	33	36
14	27	25	194	43	218	87	159	109	89	40	30	34
15	28	25	211	42	297	87	168	106	73	40	28	35
16	29	26	211	41	337	130	209	103	70	38	27	35
17	28	27	200	40	350	214	271	101	68	37	25	34
18	27	29	182	39	336	292	321	99	66	36	24	33
19	27	30	161	38	315	332	344	97	62	36	23	31
20	26	34	139	37	288	340	342	99	60	35	22	30
21	26	36	123	36	259	357	323	101	58	35	21	30
22	28	38	112	36	231	368	307	106	56	34	20	29
23	30	41	100	36	208	365	314	116	55	33	20	28
24	32	43	94	36	187	353	318	127	53	34	19	28
25	33	44	87	36	174	333	310	134	51	33	19	36
26	34	45	80	36	165	308	293	169	51	34	16	50
27	34	47	74	36	150	284	271	237	50	35	12	64
28	33	53	68	37	141	264	243	280	47	36	11	68
29	32	61	64	38	130	245	221	290	46	35	11	65
30	32	67	61	39	---	227	196	282	45	33	11	61
31	30	---	57	39	---	211	---	267	---	33	12	---
TOTAL	835	1017	3462	1320	4372	6123	6976	4621	2937	1172	802	1073
MEAN	26.9	33.9	112	42.6	151	198	233	149	97.9	37.8	25.9	35.8
MAX	34	67	211	54	350	368	344	290	240	43	41	68
MIN	22	25	57	36	38	87	159	97	45	33	11	16
CFSM	.25	.32	1.06	.40	1.43	1.87	2.20	1.41	.92	.36	.24	.34
IN.	.29	.36	1.21	.46	1.53	2.15	2.45	1.62	1.03	.41	.28	.38

CAL YR 1983 TOTAL 31873 MEAN 87.3 MAX 343 MIN 19 CFSM .82 IN 11.19
WTR YR 1984 TOTAL 34710 MEAN 94.8 MAX 368 MIN 11 CFSM .89 IN 12.18

04099750 PIGEON RIVER NEAR SCOTT, IN

LOCATION.--Lat 41°44'56", long 85°34'35", in SE¼NW¼ sec.14, T.38 N., R.8 E., Lagrange County, Hydrologic Unit 04050001, on right bank 20 ft downstream from bridge on County Road 750 North, 1,200 ft downstream from Page ditch, 0.7 mile south of Indiana-Michigan State line, and 1.2 miles northwest of Scott.

DRAINAGE AREA.--361 mi², of which 53.9 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--June 1968 to current year.

REVISED RECORDS.--WSP 2111: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 815.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--16 years, 361 ft³/s, 13.58 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,370 ft³/s Mar. 21, 1982, gage height, 7.85 ft; minimum daily, 42 ft³/s Oct. 21, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,080 ft³/s Mar. 22, gage height, 5.53 ft; minimum daily, 100 ft³/s Aug. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	137	168	274	270	216	428	694	714	798	234	150	117
2	135	169	269	265	213	390	644	658	763	226	156	138
3	131	177	269	262	208	366	606	601	714	222	162	138
4	131	178	278	264	205	348	601	566	653	220	163	138
5	132	170	290	266	210	335	592	543	597	220	172	134
6	130	168	351	262	212	323	574	516	553	220	170	132
7	128	169	422	258	214	315	543	462	493	221	170	140
8	127	170	403	255	212	299	540	460	431	211	173	148
9	132	168	395	252	214	285	545	448	405	207	174	150
10	133	170	398	249	220	280	543	435	374	219	184	189
11	146	170	423	244	246	276	529	420	344	219	191	200
12	149	169	503	240	342	267	513	405	324	221	206	172
13	165	166	618	236	534	266	532	393	323	199	195	187
14	187	162	654	228	680	261	531	384	383	183	176	252
15	171	169	641	224	704	270	580	367	363	182	166	267
16	156	204	656	220	739	455	725	348	327	175	156	222
17	153	211	677	216	793	675	828	335	312	167	148	195
18	152	199	652	212	838	702	853	325	311	165	146	181
19	151	197	578	207	860	714	887	321	298	154	140	172
20	150	211	472	201	846	819	904	355	284	150	134	168
21	150	209	418	198	808	969	902	398	271	151	128	164
22	172	204	378	194	760	1080	909	429	262	155	124	160
23	216	210	360	192	707	1070	952	499	276	152	113	156
24	208	228	344	190	651	1050	1010	499	282	148	108	158
25	192	221	327	190	597	1030	978	475	267	192	107	213
26	184	219	317	192	542	1000	942	616	246	194	107	384
27	178	221	304	196	500	950	911	792	241	207	113	349
28	173	285	293	202	471	905	872	792	243	199	110	305
29	169	321	285	209	433	858	821	780	241	186	104	289
30	168	292	278	214	---	798	774	815	237	176	104	274
31	167	---	272	218	---	747	---	817	---	160	100	---
TOTAL	4873	5975	12799	7026	14175	18531	21835	15968	11616	5935	4550	5892
MEAN	157	199	413	227	489	598	728	515	387	191	147	196
MAX	216	321	677	270	860	1080	1010	817	798	[illegible]	206	384
MIN	127	162	269	190	205	261	513	321	237	[illegible]	100	117
CFSM	.44	.55	1.14	.63	1.36	1.66	2.02	1.43	1.07	[illegible]	.41	.54
IN.	.50	.62	1.32	.72	1.46	1.91	2.25	1.65	1.20	.61	.47	.61

CAL YR 1983 TOTAL 131403 MEAN 360 MAX 1310 MIN 115 CFSM 1.00 IN 13.54
WTR YR 1984 TOTAL 129175 MEAN 353 MAX 1080 MIN 100 CFSM .98 IN 13.31

04099808 LITTLE ELKHART RIVER AT MIDDLEBURY, IN

LOCATION.--Lat 41°40'31", long 85°42'01", in NE¼SE¼ sec.10, T.37 N., R.7 E., Elkhart County, Hydrologic Unit 04050001, on left bank 15 ft downstream from bridge on County Road 16, 0.1 mile east of Middlebury, and 1.7 mi downstream from Rowe Eden ditch.

DRAINAGE AREA.--97.6 mi², of which 5.89 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1979 to current year.

REVISED RECORDS.--WRD IN-82-1: 1980, 1981.

GAGE.--Water-stage recorder. Datum of gage is 810.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--5 years, 100.4 ft³/s, 13.97 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,690 ft³/s, July 26, 1981, gage height, 9.58 ft; minimum daily, 32 ft³/s Aug. 30, 31, 1984.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 13	0400	*580	*7.36

Minimum daily discharge, 32 ft³/s Aug. 30, 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	48	68	71	54	84	107	128	102	62	44	35
2	41	48	64	70	54	84	103	122	97	62	48	36
3	41	48	62	70	71	82	103	124	93	62	48	38
4	42	48	64	70	73	81	112	117	87	62	47	38
5	42	48	64	69	70	81	111	113	85	61	51	37
6	42	48	120	67	67	79	113	110	83	60	51	36
7	42	48	107	66	63	76	106	111	82	58	63	40
8	43	47	99	64	60	74	99	110	81	57	54	38
9	43	47	80	61	57	75	95	108	80	58	50	41
10	43	46	73	58	56	75	92	104	80	55	49	56
11	43	47	82	57	85	73	89	101	78	60	48	50
12	44	47	275	57	248	71	90	99	77	58	47	46
13	49	46	218	57	519	71	102	97	110	55	46	53
14	49	46	166	56	315	70	103	91	400	52	44	66
15	47	49	145	56	216	77	232	89	250	52	43	59
16	46	57	120	56	175	319	294	85	170	52	41	54
17	45	55	106	56	156	239	241	81	120	51	41	51
18	45	53	99	56	142	163	225	78	99	49	40	49
19	45	53	92	56	137	139	186	77	82	48	41	47
20	45	54	88	55	126	217	161	90	69	48	38	46
21	46	52	84	55	118	239	145	90	65	48	36	45
22	62	51	80	55	110	189	188	90	66	48	36	45
23	63	55	79	55	105	161	280	115	81	46	36	44
24	58	57	77	56	100	169	213	105	74	68	36	45
25	55	55	76	56	95	161	180	100	69	62	35	83
26	53	53	74	56	91	146	170	230	69	58	35	119
27	51	56	72	56	89	143	157	180	68	58	34	82
28	50	91	72	54	77	148	152	150	65	54	35	71
29	48	86	72	54	81	132	143	130	64	51	34	65
30	48	75	71	54	---	120	137	120	64	49	32	61
31	48	---	70	54	---	113	---	110	---	46	32	---
TOTAL	1460	1614	3019	1833	3610	3951	4529	3455	3010	1710	1315	1576
MEAN	47.1	53.8	97.4	59.1	124	127	151	111	100	55.2	42.4	52.5
MAX	63	91	275	71	519	319	294	230	400	68	63	119
MIN	41	46	62	54	54	70	89	77	64	46	32	35
CFSM	.48	.55	1.00	.61	1.27	1.30	1.55	1.14	1.03	.57	.43	.54
IN.	.56	.62	1.15	.70	1.38	1.51	1.73	1.32	1.15	.65	.50	.60

CAL YR 1983 TOTAL 32637 MEAN 89.4 MAX 801 MIN 37 CFSM .92 IN 12.44
WTR YR 1984 TOTAL 31082 MEAN 84.9 MAX 519 MIN 32 CFSM .87 IN 11.85

04099850 PINE CREEK NEAR ELKHART, IN

LOCATION.--Lat 41°40'53", long 85°52'57", in NE¼NW¼ sec.7, T.37 N., R.6 E., Elkhart County, Hydrologic Unit 04050001, on right bank 50 ft upstream from bridge on County Road 14, 0.3 mile east of the intersection of County Roads 17 and 14, and 3.1 miles east of Elkhart.

DRAINAGE AREA.--31.0 mi^2, of which 8.75 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1979 to current year.

GAGE.--Water stage recorder. Datum of gage is 755.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--5 years, 19.9 ft^3/s, 8.72 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 509 ft^3/s March 14, 1982, gage height, 7.18 ft; maximum gage height, 9.74 ft July 26, 1981; minimum daily discharge, 3.8 ft^3/s July 26, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 170 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jun. 14	0845	*137	*4.62

Minimum daily discharge, 7.1 ft^3/s Aug. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	8.7	13	11	9.4	11	17	21	21	15	9.4	8.0
2	7.2	8.7	12	11	9.7	12	16	21	20	15	12	8.5
3	7.2	8.7	11	12	14	13	17	20	19	14	14	8.7
4	7.3	8.7	12	12	13	15	20	21	18	14	12	8.7
5	7.4	8.7	12	12	12	14	19	21	18	14	11	8.3
6	7.4	8.7	21	12	11	13	18	20	17	13	12	8.6
7	7.4	8.4	19	11	10	12	17	20	17	13	40	8.9
8	7.4	8.4	17	11	9.7	11	16	19	17	12	19	8.7
9	7.5	8.4	15	11	9.3	10	16	19	17	13	15	8.9
10	7.6	8.2	14	10	10	11	15	18	17	13	14	9.7
11	7.7	8.7	16	9.9	14	12	15	18	16	14	13	8.9
12	7.9	8.7	58	9.9	59	13	15	18	16	13	12	8.7
13	8.4	8.4	36	9.9	94	12	19	18	26	12	12	10
14	8.9	8.4	27	10	53	12	26	17	111	11	11	13
15	8.0	8.7	23	9.4	38	15	61	17	50	12	11	11
16	8.0	9.7	20	10	31	65	82	16	34	11	10	10
17	8.0	9.4	18	10	29	44	59	16	28	11	9.9	9.7
18	8.0	8.9	17	9.3	26	29	48	16	25	10	10	9.4
19	8.0	9.2	14	8.5	24	24	41	16	22	9.7	9.7	8.9
20	8.0	9.2	13	7.9	21	42	34	20	20	9.7	9.2	8.7
21	8.0	9.4	12	7.6	20	40	30	20	19	9.7	8.9	8.5
22	11	8.9	12	7.8	19	33	41	20	18	9.4	8.7	8.6
23	13	9.4	13	8.0	18	28	52	33	26	9.4	8.5	9.0
24	12	10	14	9.2	17	30	39	23	21	15	8.2	10
25	10	9.9	14	9.9	16	28	32	21	19	13	8.1	17
26	9.9	9.4	13	10	14	24	28	65	17	12	7.9	21
27	9.4	9.7	12	10	12	23	26	41	17	13	7.7	14
28	9.2	20	12	9.4	12	23	24	31	16	12	7.5	12
29	8.9	16	11	9.9	11	20	22	28	16	11	7.1	11
30	8.9	14	11	9.9	---	19	23	23	15	11	7.3	11
31	8.9	---	11	9.9	---	18	---	22	---	10	7.7	---
TOTAL	263.7	291.6	523	309.4	636.1	676	888	701	713	374.9	353.8	307.4
MEAN	8.51	9.72	16.9	9.98	21.9	21.8	29.6	22.6	23.8	12.1	11.4	10.2
MAX	13	20	58	12	94	65	82	65	111	15	40	21
MIN	7.2	8.2	11	7.6	9.3	10	15	16	15	9.4	7.1	8.0
CFSM	.28	.31	.55	.32	.71	.70	.96	.73	.77	.39	.37	.33
IN.	.32	.35	.63	.37	.76	.81	1.07	.84	.86	.45	.42	.37

CAL YR 1983 TOTAL 6925.7 MEAN 19.0 MAX 157 MIN 7.2 CFSM .61 IN 8.31
WTR YR 1984 TOTAL 6037.9 MEAN 16.5 MAX 111 MIN 7.1 CFSM .53 IN 7.25

04100222 NORTH BRANCH ELKHART RIVER AT COSPERVILLE, IN

LOCATION.--Lat 41°28'54", long 85°28'32", in NE¼NW¼ sec.22, T.35 N., R.9 E., Noble County, Hydrologic Unit 04050001, on right bank at downstream side of bridge on County Road 900 North at Cosperville, 1,300 ft downstream from Boyd ditch, 1.7 miles upstream from Hustin ditch, and 3.1 miles downstream from Waldron Lake.

DRAINAGE AREA.--142 mi².

PERIOD OF RECORD.--October 1971 to current year. October 1950 to September 1971 at site 3.1 miles upstream, published as North Branch Elkhart River near Cosperville. Records may not be equivalent.

GAGE.--Water-stage recorder. Datum of gage is 880.12 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated at times by dam at Waldron Lake.

AVERAGE DISCHARGE.--13 years, 137 ft³/s, 13.10 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 919 ft³/s Mar. 23, 1982 gage height, 8.12 ft; minimum daily, 2.4 ft³/s Nov. 21, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 357 ft³/s Mar. 22, gage height, 5.58 ft; minimum daily, 20 ft³/s Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	39	138	135	64	164	336	245	310	61	43	95
2	31	56	122	135	66	158	327	238	293	59	68	96
3	28	86	108	130	74	152	312	227	275	56	107	88
4	27	96	105	130	81	145	286	219	253	55	131	81
5	26	98	108	125	86	137	260	211	233	53	153	74
6	23	97	146	120	83	132	240	202	214	49	152	69
7	23	96	171	115	81	126	226	190	196	47	143	68
8	21	92	168	108	78	118	208	176	178	47	137	67
9	22	88	159	104	75	110	191	152	160	46	127	68
10	21	91	150	103	77	106	173	157	143	47	117	72
11	20	101	152	99	87	101	156	145	129	56	110	75
12	22	100	205	97	127	100	142	133	117	55	106	74
13	32	97	238	95	233	99	139	127	106	53	96	74
14	37	91	248	93	286	97	139	120	137	49	92	78
15	39	88	243	91	292	100	156	113	137	42	101	76
16	37	96	231	88	281	221	186	105	130	34	105	73
17	34	94	217	87	268	292	210	99	123	34	106	69
18	34	89	200	86	253	300	225	92	116	34	111	66
19	33	90	190	85	245	287	226	90	109	32	114	61
20	34	93	185	85	235	307	224	113	102	31	113	43
21	33	88	180	84	228	342	222	138	95	31	111	40
22	49	85	175	84	224	354	236	145	89	30	117	36
23	61	91	170	83	224	354	263	159	97	29	120	35
24	61	110	165	85	221	354	279	161	95	57	120	34
25	57	123	160	86	210	354	285	168	89	86	117	67
26	53	129	155	76	201	350	286	261	82	87	113	122
27	49	132	150	69	194	349	285	309	76	85	107	114
28	44	158	150	67	188	352	277	329	73	81	104	88
29	44	159	145	66	171	350	269	334	70	69	108	71
30	41	152	140	64	---	347	249	333	65	57	105	59
31	40	---	140	63	---	344	---	325	---	48	97	---
TOTAL	1110	3005	5214	2938	4933	7102	7013	5816	4292	1600	3451	2133
MEAN	35.8	100	168	94.8	170	229	234	188	143	51.6	111	71.1
MAX	61	159	248	135	292	354	336	334	310	87	153	122
MIN	20	39	105	63	64	97	139	90	65	29	43	34
CFSM	.25	.70	1.18	.67	1.20	1.61	1.65	1.32	1.01	.36	.78	.50
IN.	.29	.79	1.37	.77	1.29	1.86	1.84	1.52	1.12	.42	.90	.56

CAL YR 1983 TOTAL 47451.1 MEAN 130 MAX 474 MIN 7.8 CFSM .92 IN 12.43
WTR YR 1984 TOTAL 48607.0 MEAN 133 MAX 354 MIN 20 CFSM .94 IN 12.73

04100252 FORKER CREEK NEAR BURR OAK, IN

LOCATION.--Lat 41°19'58", long 85°25'25", in SE¼ NE¼ sec.12, T.33 N., R.9 E., Noble County, Hydrologic Unit 04050001, on right bank 300 ft downstream from bridge on State Highway 9, 400 ft downstream from Miller Lake Outlet, 0.8 mile northeast of Burr Oak, and 4.5 miles south of Albion.

DRAINAGE AREA.--19.2 mi².

PERIOD OF RECORD.--June 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 889.00 ft National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark).

REMARKS.--Records poor. Occasional regulation at Miller Lake Outlet.

AVERAGE DISCHARGE.--15 years, 17.8 ft³/s, 12.55 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 338 ft³/s Mar. 14, 1982, gage height, 6.71 ft; minimum daily, 0.13 ft³/s Sept. 10, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 164 ft³/s May 27, gage height, 4.27 ft; minimum daily 0.45 ft³/s Oct. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.52	1.4	14	6.0	4.6	13	30	20	58	7.2	2.3	.88
2	.52	1.4	14	5.9	4.5	12	26	19	44	6.9	2.8	.95
3	.51	1.6	11	5.9	4.7	9.8	24	17	38	6.6	3.7	1.2
4	.54	1.7	11	5.7	6.0	8.5	23	16	36	6.4	6.2	1.1
5	.57	1.9	9.7	5.4	8.0	8.2	23	15	29	6.2	11	1.0
6	.55	1.9	17	4.7	8.0	8.0	28	14	24	6.0	13	.93
7	.53	1.9	24	4.4	7.4	7.7	33	13	21	5.7	10	1.0
8	.49	2.0	29	4.2	7.0	7.6	34	13	18	5.5	7.6	1.1
9	.47	2.0	33	4.1	6.5	7.5	32	12	16	5.2	6.0	1.2
10	.47	2.0	29	3.9	8.0	7.2	28	12	14	4.9	5.0	1.3
11	.49	1.9	28	3.9	15	7.0	25	11	12	5.8	4.4	1.3
12	.54	2.0	50	3.9	60	6.7	22	10	11	6.3	3.8	1.2
13	.49	2.0	78	3.9	102	6.9	21	10	11	5.6	3.2	1.2
14	.49	2.0	87	3.9	142	6.7	21	11	12	4.8	2.7	1.3
15	.49	2.0	81	3.9	129	8.1	27	11	14	4.1	2.2	1.2
16	.53	2.0	70	3.9	114	68	37	10	13	3.8	1.9	1.1
17	.54	2.0	58	3.9	87	132	47	9.8	12	3.6	1.6	1.0
18	.53	2.0	47	3.9	70	132	57	9.6	14	3.4	1.4	.98
19	.49	2.4	36	3.8	58	104	56	9.3	13	3.1	1.2	.92
20	.46	2.8	28	3.8	48	99	51	9.2	12	2.8	1.1	.90
21	.45	2.8	23	3.8	39	107	43	16	10	2.6	1.5	.90
22	.51	3.0	19	5.2	33	103	41	18	9.4	2.4	1.5	.84
23	.49	3.3	15	7.0	28	86	53	24	9.0	2.3	1.3	.82
24	.51	3.3	12	12	24	74	59	29	8.7	3.4	1.2	.82
25	.56	3.3	9.8	8.0	21	66	55	36	10	4.1	1.1	.96
26	.60	3.0	8.3	6.8	20	60	47	113	15	4.3	.95	1.0
27	.81	3.5	7.8	5.7	18	55	39	161	11	5.6	.87	.94
28	1.2	8.0	7.3	5.3	17	51	32	146	9.5	5.4	.90	.90
29	1.5	11	6.9	5.1	15	46	27	115	8.2	4.7	.84	.86
30	1.5	14	6.5	4.9	---	40	22	91	7.6	3.6	.81	.82
31	1.4	---	6.2	4.8	---	35	---	72	---	2.7	.74	---
TOTAL	19.75	94.1	876.5	157.6	1104.7	1382.9	1063	1072.9	520.4	145.0	102.81	30.62
MEAN	.64	3.14	28.3	5.08	38.1	44.6	35.4	34.6	17.3	4.68	3.32	1.02
MAX	1.5	14	87	12	142	132	59	161	58	7.2	13	1.3
MIN	.45	1.4	6.2	3.8	4.5	6.7	21	9.2	7.6	2.3	.74	.82
CFSM	.03	.16	1.47	.27	1.98	2.32	1.84	1.80	.90	.24	.17	.05
IN.	.04	.18	1.70	.31	2.14	2.68	2.06	2.08	1.01	.28	.20	.06

CAL YR 1983 TOTAL 5667.70 MEAN 15.5 MAX 181 MIN .45 CFSM .81 IN 10.98
WTR YR 1984 TOTAL 6570.28 MEAN 18.0 MAX 161 MIN .45 CFSM .94 IN 12.73

04100295 RIMMELL BRANCH NEAR ALBION, IN

LOCATION.--Lat 41°23'07", long 85°22'14", in NE¼SE¼ sec.21, T.34 N., R.10 E., Noble County, Hydrologic Unit 04050001, on right bank 900 ft downstream from culvert on County Road 300 E, .75 mile south of State Highway 8, 3.0 miles east of intersection of State Highway 9 and State Highway 8 in Albion.

DRAINAGE AREA.--10.7 mi².

PERIOD OF RECORD.--November 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is 935.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 397 ft³/s April 14, 1981, gage height, 12.82 ft; minimum daily, 0.14 ft³/s many days during 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 12	0345	106	8.22	Mar. 16	0100	*292	*11.38
Feb. 13	----	140	8.90	May 26	0015	196	9.86

Minimum daily, 0.20 ft³/s Oct. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	.81	4.2	2.9	2.6	7.3	13	8.6	12	1.6	.66	1.1
2	.36	.81	3.1	2.9	2.5	6.9	11	8.0	9.6	1.5	48	1.1
3	.32	.90	2.6	2.8	2.9	6.4	11	7.4	7.8	1.6	38	.73
4	.28	.90	3.6	2.8	3.3	6.1	13	7.2	6.5	1.5	43	.63
5	.24	.95	6.4	2.8	3.2	5.9	22	7.0	5.7	1.4	30	.50
6	.24	1.0	45	2.9	3.0	5.6	27	6.3	4.9	1.3	14	.47
7	.24	1.0	23	3.0	2.9	6.5	18	5.7	4.4	1.3	25	.47
8	.36	1.0	13	2.8	2.7	6.2	15	5.3	4.1	1.2	11	.50
9	.47	1.0	9.7	2.6	2.6	5.8	13	5.1	3.7	1.1	7.7	.78
10	.40	1.2	8.1	2.6	3.1	5.5	11	4.4	3.3	1.1	5.0	1.7
11	.36	1.9	19	2.5	11	5.3	10	4.1	2.9	1.0	3.8	.86
12	.40	2.2	96	2.4	38	5.2	9.8	3.9	2.8	1.0	2.7	.63
13	.64	1.9	58	2.4	122	4.4	12	3.9	2.7	.95	2.3	.50
14	.64	1.8	33	2.3	70	4.3	13	3.7	2.7	.90	2.0	.57
15	.51	1.8	23	2.3	40	20	24	3.5	2.5	.86	1.7	.50
16	.32	3.6	14	2.3	31	223	43	3.2	2.4	.84	1.5	.42
17	.28	3.3	10	2.3	25	104	39	3.1	2.6	.80	1.4	.39
18	.24	2.0	7.6	2.2	21	59	35	2.9	2.5	.77	1.3	.39
19	.20	3.2	6.2	2.0	18	44	24	2.7	2.2	.75	1.2	.39
20	.32	4.5	5.8	1.9	15	72	18	9.9	2.1	.73	1.1	.36
21	.40	4.0	6.0	2.0	12	61	15	11	1.9	.72	.94	.33
22	2.2	2.7	6.1	2.2	11	41	38	11	1.9	.71	.84	.33
23	2.3	2.7	5.8	2.3	9.8	34	45	27	2.5	.70	.75	.36
24	1.3	4.9	5.0	2.3	8.9	32	29	14	2.0	9.3	.66	.39
25	1.0	3.4	4.4	2.2	8.1	28	20	32	1.8	6.6	.57	1.0
26	.90	2.3	3.9	2.1	7.5	25	16	144	1.7	2.2	.50	1.7
27	.81	2.9	3.6	2.1	7.3	25	13	67	1.7	1.9	.43	.82
28	.81	27	3.3	2.2	6.4	26	11	42	1.5	1.2	.38	.68
29	.81	13	3.2	2.4	5.9	20	9.9	31	1.5	.97	.34	.68
30	.81	6.3	3.1	2.6	---	17	9.3	22	1.5	.86	.30	.57
31	.81	---	3.0	2.8	---	15	---	16	---	.78	.25	---
TOTAL	19.37	104.97	438.7	75.9	496.7	927.4	588.0	522.9	105.4	48.14	247.32	19.85
MEAN	.62	3.50	14.2	2.45	17.1	29.9	19.6	16.9	3.51	1.55	7.98	.66
MAX	2.3	27	96	3.0	122	223	45	144	12	9.3	48	1.7
MIN	.20	.81	2.6	1.9	2.5	4.3	9.3	2.7	1.5	.70	.25	.33
CFSM	.06	.33	1.33	.23	1.60	2.79	1.83	1.58	.33	.15	.75	.06
IN.	.07	.36	1.53	.26	1.73	3.22	2.04	1.82	.37	.17	.86	.07

CAL YR 1983 TOTAL 2818.86 MEAN 7.72 MAX 210 MIN .20 CFSM .72 IN 9.80
WTR YR 1984 TOTAL 3594.65 MEAN 9.82 MAX 223 MIN .20 CFSM .92 IN 12.50

BEST COPY AVAILABLE

04100465 TURKEY CREEK AT SYRACUSE, IN

LOCATION.--Lat 41°25'35", long 85°45'16", in NE¼SE¼ sec.6, T.34 N., R.7 E., Kosciusko County, Hydrologic Unit 04050001, on right bank 75 ft upstream from Main Street bridge in Syracuse and 1,500 ft downstream from dam at outlet of Syracuse Lake.

DRAINAGE AREA.--43.8 mi².

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 848.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Flow occasionally regulated by dam on Syracuse Lake.

AVERAGE DISCHARGE.--15 years, 36.8 ft³/s, 11.41 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 170 ft³/s June 14, 1981, gage height, 5.37 ft; minimum daily, 0.82 ft³/s Oct. 8, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 109 ft³/s Feb. 13, gage height, 4.10 ft; minimum daily, 1.7 ft³/s Oct. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	1.9	5.5	45	30	7.3	85	76	18	18	7.2	5.6
2	3.1	2.4	4.7	45	91	7.0	84	75	17	17	8.0	4.7
3	4.0	2.8	4.1	45	91	6.7	85	75	16	17	11	4.8
4	4.1	3.0	4.6	45	90	6.2	84	74	17	16	14	4.5
5	3.9	3.2	5.2	45	89	6.1	84	73	17	16	14	4.5
6	4.2	3.1	7.4	45	89	6.0	85	72	16	16	15	4.1
7	4.1	3.2	8.8	45	88	5.9	85	70	16	14	23	6.0
8	4.0	3.3	9.0	46	87	5.8	82	62	16	14	20	4.5
9	3.6	3.3	12	47	86	5.7	81	57	17	13	19	8.4
10	4.2	3.3	16	47	86	5.6	81	43	16	12	18	6.2
11	4.3	3.7	20	47	88	5.6	80	4.9	15	14	17	5.8
12	4.2	3.8	27	47	93	5.8	80	4.8	15	12	16	5.8
13	5.5	3.6	37	48	107	6.0	81	4.3	19	12	15	6.0
14	4.3	3.5	53	48	108	6.2	81	4.5	19	11	14	7.3
15	4.2	3.9	60	48	105	7.8	78	4.7	17	10	13	5.8
16	4.3	4.7	62	49	100	17	84	4.5	18	9.0	13	5.5
17	4.4	4.7	61	49	98	60	85	4.5	21	8.8	12	5.3
18	4.7	4.7	58	50	95	91	85	4.5	16	7.2	11	5.1
19	5.0	5.0	54	51	93	88	84	4.7	14	6.5	10	4.9
20	5.4	4.9	52	52	92	92	82	7.3	13	6.5	10	4.5
21	5.9	4.9	50	53	90	95	80	6.2	12	5.8	9.0	4.5
22	5.2	4.9	50	55	90	95	82	6.7	11	5.8	8.3	4.3
23	2.6	5.1	49	57	89	93	84	6.6	46	5.8	7.4	4.5
24	2.6	5.0	49	69	88	92	84	6.5	35	8.7	7.0	12
25	2.7	4.7	48	54	88	92	82	10	30	8.1	6.7	10
26	2.6	4.4	48	17	86	92	81	19	28	9.3	6.1	9.0
27	2.4	4.6	47	16	86	91	79	23	26	9.3	6.1	8.1
28	2.2	6.8	47	16	86	90	78	21	25	8.3	5.9	7.3
29	1.8	7.2	47	16	31	88	76	19	23	7.7	5.8	6.5
30	1.7	6.5	46	16	---	86	77	18	20	7.5	5.1	6.5
31	1.9	---	45	16	---	86	---	18	---	7.5	4.4	---
TOTAL	116.5	126.1	1087.3	1329	2540	1441.7	2455	879.7	589	335.8	352.0	182.0
MEAN	3.76	4.20	35.1	42.9	87.6	46.5	81.8	28.4	19.6	10.8	11.4	6.07
MAX	5.9	7.2	62	69	108	95	85	76	46	18	23	12
MIN	1.7	1.9	4.1	16	30	5.6	76	4.3	11	5.8	4.4	4.1
CFSM	.09	.10	.80	.98	2.00	1.06	1.87	.65	.45	.25	.26	.14
IN.	.10	.11	.92	1.13	2.16	1.22	2.09	.75	.50	.28	.30	.15

CAL YR 1983 TOTAL 12575.7 MEAN 34.5 MAX 111 MIN 1.7 CFSM .79 IN 10.68
WTR YR 1984 TOTAL 11432.1 MEAN 31.2 MAX 108 MIN 1.7 CFSM .71 IN 9.71

04100500 ELKHART RIVER AT GOSHEN, IN

LOCATION.--Lat 41°35'36", long 85°50'55", in NE¼NE¼ sec.8, T.36 N., R.6 E., Elkhart County, Hydrologic Unit 04050001, on right bank 20 ft downstream from River Avenue bridge at Goshen, 0.4 mile upstream from Rock Run, and at mile 16.1.

DRAINAGE AREA.--594 mi².

PERIOD OF RECORD.--April 1931 to current year.

REVISED RECORDS.--WSP 1337: 1939(M). WSP 1557: 1954. WSP 2111: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 769.43 ft National Geodetic Vertical Datum of 1929. Prior to Nov. 20, 1931, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--53 years, 514 ft³/s. 11.75 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,180 ft³/s Mar. 14, 1982, gage height, 11.94 ft; minimum daily, 7.0 ft³/s Aug. 11, 1964, result of extreme regulation.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 14	0400	*2400	*6.44	Mar. 22	0100	1840	5.50

Minimum daily discharge, 145 ft³/s Oct. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	189	448	497	276	602	1060	854	1100	343	253	229
2	158	188	426	497	288	575	1010	805	1060	328	246	233
3	153	190	413	493	371	544	974	775	996	312	272	241
4	147	205	413	479	404	521	976	768	928	308	355	232
5	162	230	417	470	410	497	958	741	856	295	400	221
6	158	236	507	461	370	479	919	707	787	288	421	211
7	145	243	662	450	350	452	870	683	717	284	439	221
8	157	243	634	439	390	430	818	662	660	264	456	215
9	152	240	606	434	417	379	778	638	612	264	439	224
10	157	235	592	426	417	320	749	615	564	257	421	311
11	154	238	611	410	443	320	715	598	525	280	404	278
12	154	249	844	400	690	379	694	559	493	276	379	248
13	171	257	1280	390	1780	379	705	537	539	264	363	265
14	183	261	1280	390	2300	371	714	521	676	246	335	287
15	190	264	1140	390	1900	400	793	506	583	231	308	274
16	191	288	1060	400	1660	808	1040	491	502	228	295	256
17	191	304	929	380	1520	1460	1170	486	479	210	288	256
18	185	300	824	370	1420	1310	1160	479	479	197	283	241
19	179	300	790	360	1330	1150	1100	475	456	194	281	223
20	181	304	750	350	1260	1290	1050	546	426	190	289	214
21	182	312	720	350	1160	1700	993	618	404	190	278	194
22	226	304	690	340	1080	1770	1030	670	396	194	268	177
23	292	312	660	340	990	1590	1210	679	552	187	269	171
24	302	312	640	343	914	1550	1270	666	592	187	267	169
25	280	324	610	355	844	1560	1160	623	507	228	263	306
26	260	335	590	355	778	1540	1080	879	448	284	259	388
27	250	351	580	320	734	1490	1030	1240	413	312	256	386
28	222	426	560	310	700	1430	989	1130	392	308	248	349
29	209	497	550	295	602	1350	940	1090	371	291	238	312
30	195	484	530	280	---	1230	900	1120	355	288	230	280
31	193	---	520	270	---	1130	---	1120	---	264	226	---
TOTAL	5939	8621	21276	12044	25798	29006	28855	22281	17868	7992	9729	7612
MEAN	192	287	686	389	890	936	962	719	596	258	314	254
MAX	302	497	1280	497	2500	1770	1270	1240	1100	343	456	388
MIN	145	188	413	270	276	320	694	475	355	187	226	169
CFSM	.32	.48	1.16	.66	1.50	1.58	1.62	1.21	1.00	.43	.53	.43
IN.	.37	.54	1.33	.75	1.62	1.82	1.81	1.40	1.12	.50	.61	.48

CAL YR 1983 TOTAL 203716 MEAN 558 MAX 2800 MIN 108 CFSM .94 IN 12.76
WTR YR 1984 TOTAL 197021 MEAN 538 MAX 2300 MIN 145 CFSM .91 IN 12.34

04101000 ST. JOSEPH RIVER AT ELKHART, IN

LOCATION.--Lat 41°41'30", long 85°58'30", in SW¼NE¼ sec.5, T.37 N., R.5 E., Elkhart County, Hydrologic Unit 04050001, on left bank 200 ft downstream from Elkhart River, 200 ft upstream from Main Street bridge in Elkhart, 2,000 ft downstream from Christiana Creek, 0.5 mile downstream from Elkhart Hydroelectric Plant, and at mile 76.5.

DRAINAGE AREA.--3,370 mi².

PERIOD OF RECORD.--August 1947 to current year. Gage heights at site 0.8 mile downstream at different datum from September 1924 to March 1926 are available from the district office.

REVISED RECORDS.--WSP 2111: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. The flow is regulated by Elkhart Hydroelectric Plant.

AVERAGE DISCHARGE.--37 years, 3,176 ft³/s, 12.80 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,600 ft³/s Mar. 21, 1982, gage height, 27.91 ft; minimum daily, 336 ft³/s Aug. 5, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,970 ft³/s Mar. 21, gage height, 22.31 ft; minimum daily, 1,020 ft³/s Aug. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1400	1960	2950	3150	2500	3750	5560	5060	6320	1960	1460	1210
2	1380	1640	3010	2950	2340	3740	5200	4900	6050	2130	1490	1260
3	1650	1690	2830	3200	2570	3690	5030	4660	5610	2120	1590	1300
4	1670	1690	2910	3400	2600	3670	5170	4690	5170	1730	1490	1420
5	1580	1700	2810	3400	2750	3400	4860	4510	5000	1930	1520	1590
6	1530	1850	2920	3200	2880	3200	4950	4250	4630	1950	1920	1450
7	1350	2160	3390	3100	2850	3000	4830	4190	4430	1880	2240	1440
8	1430	1930	3280	2900	2630	2900	4700	4270	4220	1870	2070	1280
9	1350	1890	3310	2750	2810	2800	4560	3940	4030	1920	1930	1290
10	1400	2200	3400	2800	2820	2670	4480	3970	4030	2010	1910	1670
11	1420	1960	3360	2800	3040	2820	4400	3750	3670	2240	1600	1960
12	1690	1440	4020	2750	3690	2980	4280	3580	3660	1970	1520	1450
13	1680	1670	4450	2700	4950	2970	4320	3540	3660	2050	1500	1510
14	1760	1850	4810	2600	6500	2810	4430	3670	4240	1620	1520	1920
15	1710	1850	4610	2540	6860	2760	5030	3610	3310	1580	1470	1840
16	1820	2180	4600	2450	6720	4410	5930	3480	3360	1850	1370	1900
17	1670	2000	4280	2400	6390	5420	6140	3420	3190	1840	1320	2070
18	1740	2060	4050	2550	6540	5820	6210	3270	2910	1530	1340	1670
19	1950	1890	3840	2400	6160	6280	6370	2880	3150	1460	1320	1770
20	1570	1870	3490	2350	6140	6610	6200	3420	2820	1500	1290	1590
21	1520	2380	3250	2350	5970	7460	6140	3860	2760	1430	1250	1580
22	1670	2600	3050	2400	5550	7420	6340	3880	2630	1380	1230	1410
23	1910	2500	2850	2500	5390	7440	6770	4630	2920	1280	1210	1320
24	1900	2270	2600	2700	5240	7320	6520	4530	2880	1490	1160	1510
25	1930	2240	2550	2600	4930	7280	6360	4760	2880	1700	1030	2140
26	2210	2300	2700	2400	4560	7060	6210	6200	2830	1710	1020	2180
27	2140	2500	2900	2540	4480	6850	5980	6770	2440	1770	1040	2180
28	2140	2760	3150	2430	4410	6650	5700	6610	2210	1580	1040	2330
29	2050	3040	3300	2030	4080	6360	5340	6650	2380	1540	1110	1900
30	1770	3030	3300	2200	---	5970	5220	6590	2200	2100	1170	1890
31	1860	---	3300	2350	---	5770	---	6520	---	2010	1150	---
TOTAL	52860	63100	105270	82890	128350	151280	163230	140020	109590	55130	44280	50030
MEAN	1705	2103	3396	2674	4426	4880	5441	4517	3653	1778	1428	1668
MAX	2210	3040	4810	3400	6860	7460	6770	6770	6320	2240	2240	2330
MIN	1350	1440	2550	2030	2340	2670	4280	2880	2200	1280	1020	1210
CFSM	.51	.62	1.01	.79	1.31	1.45	1.62	1.34	1.08	.53	.42	.50
IN.	.58	.70	1.16	.91	1.42	1.67	1.80	1.55	1.21	.61	.49	.55

CAL YR 1983 TOTAL 1246880 MEAN 3416 MAX 9600 MIN 1010 CFSM 1.01 IN 13.76
WTR YR 1984 TOTAL 1146030 MEAN 3131 MAX 7460 MIN 1020 CFSM .93 IN 12.65

04101500 ST. JOSEPH RIVER AT NILES, MI
(National stream-quality accounting network station)

LOCATION.--Lat 41°49'45", long 86°15'35", in SW¼ sec.26, T.7 S., R.17 W., Berrien County, Hydrologic Unit 04050001, on right bank 100 ft upstream from Main Street bridge in Niles, 0.6 mi downstream from dam at French Paper Co., 1 mi upstream from Dowagiac River, and at mile 44.

DRAINAGE AREA.--3,666 mi^2.

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1307.

REVISED RECORDS.--WSP 1387: 1931, 1933-36, 1940-43, 1945-46(M). WSP 1911: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 633.02 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1968, at datum 2.00 ft higher. Oct. 1, 1930 to Feb. 11, 1931, nonrecording gage on Main Street bridge, and Feb. 12 to June 30, 1931, nonrecording gage 50 ft upstream from present site (gage heights referred to NGVD). Since Apr. 13, 1970, auxiliary water-stage recorder at sewage-treatment plant, 1.1 mi downstream from base gage at same datum. Oct. 1, 1943 to Apr. 12, 1970, auxiliary gage was headwater gage at hydroelectric plant at Buchanan Dam, 8 mi downstream from base gage at different datum.

REMARKS.--Water-discharge records good except those for the winter period, which are fair. Flow regulated by powerplants above station.

AVERAGE DISCHARGE.--54 years, 3,262 ft^3/s, 12.08 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,200 ft^3/s Apr. 5, 1950, gage height, 15.10 ft, present datum; minimum daily, 420 ft^3/s Aug. 30, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,820 ft^3/s Feb. 13, gage height, 9.29 ft; minimum daily, 1,050 ft^3/s Aug. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1690	2050	3210	3500	2710	3950	6300	5720	6700	2340	2260	1370
2	1700	2000	3240	3200	2500	3930	5860	4900	6550	2220	1790	1350
3	1610	1760	2890	3400	2650	3870	5600	5170	6290	2300	1880	1480
4	1580	1970	3170	3800	2740	3780	4640	5060	6060	2520	2130	1700
5	1890	1750	2850	3800	2840	3750	6090	4950	4810	2270	2020	1810
6	1730	1880	3180	3470	2890	3320	4380	4740	5660	2250	1880	1570
7	1810	2050	3450	3300	3030	3540	5250	4680	4340	2230	2670	1910
8	1490	2410	3390	3210	2710	3630	5010	4070	4720	2130	2670	1700
9	1550	2140	3520	2870	2930	3350	4720	4300	4510	2260	2330	1590
10	1480	1940	3450	2960	2990	2880	4950	4290	4400	2130	2360	1580
11	1690	3030	3600	3070	3180	2900	4390	4100	4040	2710	2330	1900
12	1700	1600	3940	2950	3510	3240	5120	4010	3980	2620	2000	2220
13	1920	1660	5070	2630	6780	3010	4110	3870	3970	2290	1930	1670
14	2040	1850	5120	2840	7060	2940	4580	3730	5580	2340	1780	1930
15	2020	1930	4790	2690	7640	2970	5210	3860	3610	2110	1780	2050
16	1990	2230	4760	2640	7390	4970	5820	3800	3660	1900	1640	2020
17	1920	2250	4550	2500	6940	6060	6980	3610	3600	2010	1810	2120
18	1700	2320	4110	2800	6740	6420	6520	3710	3840	2280	1640	2250
19	2120	2180	4000	2540	6820	6410	6680	3430	3570	2080	1620	1900
20	2120	1950	3900	2500	6230	6860	6830	3440	3080	1680	1620	1960
21	1710	2090	3800	2500	6290	7770	6490	3930	3070	1810	1560	1750
22	1800	2730	3300	2600	5810	8380	6820	4400	3010	1770	1490	1750
23	1810	2730	3100	2700	5520	7910	7310	5130	3560	1740	1580	1700
24	2070	2540	2800	2870	5640	7940	7140	4950	3490	1790	1500	1460
25	2050	2350	2800	2870	5310	7800	6820	5070	3340	1910	1630	2820
26	2230	2390	2800	2510	4940	7730	6540	6330	3580	2220	1050	2520
27	2410	2640	3100	2500	4610	7280	6350	7300	2960	2090	1160	2510
28	2250	2910	3500	2440	4730	7180	6060	7300	2570	2130	1250	2340
29	2150	2890	3700	2330	4370	7470	5770	7060	3260	2020	1350	2410
30	2090	3240	3500	2300	---	5720	5380	6980	2930	1990	1340	2110
31	1960	---	3800	2430	---	5880	---	6830	---	2510	1440	---
TOTAL	58270	67440	112390	88720	137500	162840	173720	150700	124740	66650	55490	57450
MEAN	1880	2248	3625	2862	4741	5253	5791	4861	4158	2150	1790	1915
MAX	2410	3240	5120	3800	7640	8380	7310	7300	6700	2710	2670	2820
MIN	1480	1600	2800	2300	2500	2880	4110	3430	2570	1680	1050	1350
CFSM	.51	.61	.99	.78	1.29	1.43	1.58	1.33	1.13	.59	.49	.52
IN.	.59	.68	1.14	.90	1.40	1.65	1.76	1.53	1.27	.68	.56	.58

CAL YR 1983 TOTAL 1399510 MEAN 3834 MAX 12100 MIN 1230 CFSM 1.05 IN 14.20
WTR YR 1984 TOTAL 1253910 MEAN 3431 MAX 8380 MIN 1050 CFSM .94 IN 12.74

04177720 FISH CREEK AT HAMILTON, IN

LOCATION.--Lat 41°31'55", long 84°54'12", in SE¼SW¼ sec.34, T.36 N., R.14 E., Steuben County, Hydrologic Unit 04100003, on left bank 6 ft upstream from bridge on County Road 775 South, 0.5 mile downstream from Hamilton Lake outlet, and 0.5 mile southeast of Hamilton.

DRAINAGE AREA.--37.5 mi².

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 876.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good, except those for winter period, which are fair.

AVERAGE DISCHARGE.--15 years, 32.2 ft³/s, 11.66 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 603 ft³/s Mar. 17, 1982, gage height, 11.52 ft; minimum daily, 0.52 ft³/s Aug. 31, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 140 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 13	0400	184	6.99	Apr. 6	0900	150	6.30
Feb. 14	0700	265	8.06	Apr. 16	1900	185	6.83
Mar. 17	0100	240	7.58	Apr. 23	1500	141	6.16
Mar. 21	0700	192	6.93	May 26	1800	*333	*8.70

Minimum daily discharge, 1.8 ft³/s Aug. 26, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	4.5	32	11	10	21	47	40	63	4.2	3.3	2.7
2	2.6	4.7	24	11	9.7	20	42	32	52	4.0	16	3.3
3	2.4	5.2	20	11	12	19	40	29	46	3.9	18	3.4
4	2.5	5.2	24	11	13	18	47	31	32	4.2	14	3.2
5	2.5	5.0	24	11	13	18	109	31	20	4.7	12	2.9
6	2.3	5.0	77	11	12	17	147	28	18	4.5	10	2.6
7	2.2	5.8	88	10	11	16	123	25	16	3.9	49	2.9
8	2.3	4.6	74	10	10	15	88	24	14	3.6	45	2.8
9	2.4	4.6	64	10	10	14	67	20	14	5.2	31	4.7
10	2.4	5.2	55	9.9	11	13	56	18	12	5.8	20	10
11	2.3	7.3	57	9.7	24	12	49	18	11	6.2	13	8.8
12	2.5	7.3	144	9.6	62	11	44	18	9.1	5.0	9.1	6.4
13	4.0	7.0	179	9.4	183	12	56	16	10	4.3	7.3	15
14	4.1	6.8	155	9.3	260	14	56	16	14	4.2	5.6	32
15	8.1	7.3	127	9.2	226	16	117	14	11	3.9	4.0	20
16	13	9.3	94	9.1	176	190	174	12	9.4	3.4	3.6	12
17	8.0	8.3	68	9.1	134	230	176	11	8.8	3.3	3.6	8.0
18	5.4	7.6	54	9.1	106	185	160	10	8.5	3.6	3.1	6.2
19	4.5	11	44	9.1	89	139	127	8.8	6.8	3.3	2.5	5.0
20	4.1	16	36	9.1	74	137	95	24	6.1	3.3	2.2	4.2
21	3.8	17	31	9.1	62	189	72	31	5.4	3.2	2.0	3.4
22	6.9	15	26	9.1	54	172	81	37	4.8	3.2	2.0	3.1
23	7.6	20	20	9.1	48	135	139	75	6.2	3.1	2.0	2.9
24	6.6	22	17	9.1	44	118	131	64	6.6	3.3	1.9	3.1
25	5.7	18	15	9.1	38	101	103	58	5.2	3.3	1.9	17
26	4.9	14	14	8.3	32	83	76	292	4.2	3.7	1.8	34
27	4.6	16	13	8.3	31	76	65	302	4.7	4.2	1.8	36
28	4.7	60	13	8.5	32	79	58	236	4.7	4.0	2.1	23
29	4.5	58	12	9.1	27	72	49	176	4.2	3.9	2.2	16
30	4.5	46	12	11	---	61	48	126	4.0	3.6	2.3	11
31	4.5	---	11	11	---	53	---	82	---	3.4	2.2	---
TOTAL	138.5	423.7	1624	300.3	1813.7	2256	2642	1904.8	431.7	123.4	294.5	325.6
MEAN	4.47	14.1	52.4	9.69	62.5	72.8	88.1	61.4	14.4	3.98	9.50	10.9
MAX	13	60	179	11	260	230	176	302	63	6.2	49	54
MIN	2.2	4.5	11	8.3	9.7	11	40	8.8	4.0	3.1	1.8	2.6
CFSM	.12	.38	1.40	.26	1.67	1.94	2.35	1.64	.38	.11	.25	.29
IN.	.14	.42	1.61	.30	1.80	2.24	2.62	1.89	.43	.12	.29	.32

CAL YR 1983 TOTAL 10474.7 MEAN 28.7 MAX 362 MIN 1.4 CFSM .77 IN 10.39
WTR YR 1984 TOTAL 12278.2 MEAN 33.5 MAX 302 MIN 1.8 CFSM .89 IN 12.18

04178000 ST. JOSEPH RIVER NEAR NEWVILLE, IN

LOCATION.--Lat 41°23'08", long 84°48'06", in SW¼SW¼ sec.18, T.5 N., R.1 E., Defiance County, Ohio, Hydrologic Unit 04100003, on left bank at bridge on Ohio State Highway 249, 3.5 miles northeast of Newville, 6.5 miles northwest of Hicksville, Ohio, and at mile 42.3.

DRAINAGE AREA.--610 mi².

PERIOD OF RECORD.--October 1946 to current year. Monthly discharge only for some periods, published in WSP 1307.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 795.40 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 22, 1947, nonrecording gage at same site and datum.

REMARKS.--Records good, except those for ice effected period, which are fair.

AVERAGE DISCHARGE.--38 years, 525 ft³/s, 11.69 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,710 ft³/s Apr. 6, 1950, gage height, 17.05 ft; maximum gage height, 17.96 ft Mar. 17, 1982; minimum daily discharge, 14 ft³/s Sept. 10, 16, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,490 ft³/s Feb. 16, gage height, 13.94 ft; minimum daily, 38 ft³/s Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	95	1300	278	130	383	897	723	1490	92	65	50
2	54	100	1090	264	128	320	752	627	1000	84	58	57
3	52	115	777	252	156	300	652	540	747	82	71	86
4	50	105	573	244	173	280	625	488	660	83	85	78
5	47	97	532	238	188	260	1210	454	686	84	106	70
6	45	96	1040	232	186	250	1680	422	595	82	82	65
7	42	107	1560	228	178	240	1640	395	478	86	168	63
8	42	113	1620	222	172	230	1480	374	398	102	188	61
9	41	112	1580	214	167	220	1260	355	349	102	174	75
10	39	111	1490	203	162	210	986	335	308	95	123	118
11	38	137	1350	194	448	205	770	318	271	95	92	136
12	39	152	1940	184	1180	200	641	305	242	92	80	139
13	54	152	2270	176	2410	200	636	292	219	85	102	148
14	65	145	2370	168	3080	210	669	273	206	80	100	251
15	83	146	2480	162	3590	229	1060	262	201	77	81	213
16	109	312	2000	158	4220	1380	1780	256	197	74	81	198
17	122	416	1380	154	4330	2210	2320	246	186	72	209	184
18	113	400	1010	148	3540	2420	2520	237	177	76	163	140
19	103	424	820	138	2790	2480	2390	225	172	78	111	112
20	93	698	695	128	2140	2510	2110	285	160	75	80	96
21	81	834	605	116	1750	2800	1790	456	148	68	65	84
22	107	790	820	126	1420	2660	1660	582	137	63	58	74
23	154	639	745	138	1130	2390	2060	720	133	61	54	70
24	199	785	529	146	922	2210	2120	826	127	65	50	67
25	230	775	475	152	772	2070	1970	834	125	65	48	68
26	205	696	430	150	655	1850	1760	2040	122	66	45	148
27	176	566	400	148	562	1650	1510	2910	114	68	44	380
28	161	1270	370	144	476	1550	1190	3070	107	69	43	323
29	142	1600	345	140	383	1420	960	2970	100	76	42	224
30	123	1490	315	136	---	1250	854	2620	108	74	42	177
31	107	---	295	133	---	1080	---	2060	---	70	40	---
TOTAL	2972	13478	33206	5514	37438	35667	41952	26500	9965	2439	2756	3955
MEAN	95.9	449	1071	178	1291	1151	1398	855	332	78.7	88.9	132
MAX	230	1600	2480	278	4330	2800	2520	3070	1490	102	209	380
MIN	38	95	295	116	128	200	625	225	100	61	40	50
CFSM	.16	.74	1.76	.29	2.12	1.89	2.29	1.40	.54	.13	.15	.22
IN.	.18	.82	2.03	.34	2.28	2.18	2.56	1.62	.61	.15	.17	.24

CAL YR 1983 TOTAL 217890 MEAN 597 MAX 4890 MIN 38 CFSM .98 IN 13.29
WTR YR 1984 TOTAL 215842 MEAN 590 MAX 4330 MIN 38 CFSM .97 IN 13.16

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04180000 CEDAR CREEK NEAR CEDARVILLE, IN

LOCATION.--Lat 41°13'08", long 85°04'35", in NW¼NW¼ sec.19, T.32 N., R.13 E., Allen County, Hydrologic Unit 04100003, on left bank at downstream side of bridge on State Highway 427, 3 miles northwest of Cedarville, 5.8 miles upstream from mouth, and 10 miles south of Auburn.

DRAINAGE AREA.--270 mi^2.

PERIOD OF RECORD.--October 1946 to current year.

REVISED RECORDS.--WSP 1912: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 780.09 ft National Geodetic Vertical Datum of 1929. Prior to Nov. 4, 1947, nonrecording gage at same site and datum.

REMARKS.--Records good, except for winter period which is fair.

AVERAGE DISCHARGE.--38 years, 242 ft^3/s, 12.17 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,340 ft^3/s Mar. 14, 1982, gage height, 12.98 ft; minimum daily, 13 ft^3/s Oct. 3, 1949.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft^3/s and maximum (*).

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 13	0800	2400	7.23	Mar. 21	1400	2290	6.97
Feb. 14	1100	3030	8.70	May 27	0800	*3180	*9.05
Mar. 17	0700	3110	8.89				

Minimum daily discharge, 23 ft^3/s Oct. 2,3, 10-12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	50	366	136	84	169	317	253	443	63	50	47
2	23	50	262	127	81	162	286	227	356	62	56	57
3	23	60	211	121	102	155	265	213	301	62	225	74
4	24	55	211	116	126	149	283	211	259	65	225	63
5	26	52	259	112	130	140	704	208	227	62	343	57
6	26	50	837	109	121	135	1240	192	197	63	289	52
7	24	49	1160	105	118	130	823	181	176	62	271	54
8	24	49	744	102	112	120	525	174	160	55	408	55
9	27	50	495	99	108	115	404	164	147	55	295	65
10	23	52	390	97	100	110	336	158	136	60	200	97
11	23	77	422	96	356	110	289	153	126	63	151	104
12	23	84	1720	94	996	110	262	149	121	57	132	82
13	38	72	2290	95	2250	111	311	139	117	54	110	68
14	66	65	1710	96	2950	117	308	138	121	52	95	104
15	48	67	1130	96	2380	124	366	134	111	50	79	119
16	40	130	744	95	1600	1930	976	128	108	49	74	95
17	38	141	506	94	1090	2950	1600	126	106	49	68	79
18	39	110	387	94	795	1990	1260	124	102	63	67	72
19	39	158	335	89	639	1150	875	124	99	52	63	65
20	39	314	282	81	529	1170	595	247	93	49	58	60
21	40	304	252	80	436	2150	458	502	90	49	57	57
22	111	202	364	84	370	1720	556	418	86	46	57	55
23	162	181	619	91	323	1090	1610	625	97	43	57	50
24	110	333	480	98	289	976	1320	559	91	155	55	49
25	95	233	367	100	256	809	871	390	81	277	52	51
26	77	169	293	99	227	767	607	2010	77	139	47	61
27	67	151	246	98	205	644	472	2970	77	126	46	80
28	60	984	208	97	179	660	387	2010	75	97	47	140
29	55	1100	194	95	174	563	323	1230	70	74	47	130
30	50	591	162	93	---	440	289	832	67	58	46	100
31	49	---	146	89	---	363	---	585	---	54	45	---
TOTAL	1513	5983	17782	3078	17066	21329	18918	15570	4317	2265	3815	2242
MEAN	48.8	199	574	99.3	588	688	631	502	144	73.1	123	74.7
MAX	162	1100	2290	136	2950	2950	1610	2970	443	277	408	140
MIN	23	49	146	80	81	110	262	124	67	43	45	47
CFSM	.18	.74	2.13	.37	2.18	2.55	2.34	1.86	.53	.27	.46	.28
IN.	.21	.82	2.45	.42	2.35	2.94	2.61	2.15	.59	.31	.53	.31

CAL YR 1983 TOTAL 90802 MEAN 249 MAX 3690 MIN 21 CFSM .92 IN 12.51
WTR YR 1984 TOTAL 113878 MEAN 311 MAX 2970 MIN 23 CFSM 1.15 IN 15.69

04180500 ST. JOSEPH RIVER NEAR FORT WAYNE, IN

LOCATION.--Lat 41°10'41", long 85°03'19", in NW¼NE¼ sec.3, T.31 N., R.13 E., Allen County, Hydrologic Unit 04100003, on left bank 0.8 mile downstream from Ely Run, 1.3 miles upstream from Ely Bridge and Mayhew Road, 8.0 miles northeast of the Fort Wayne Court House.

DRAINAGE AREA.--1,060 mi².

PERIOD OF RECORD.--October 1983 to current year. July 1941 to September 1955 gage located 1.3 miles downstream at Ely Bridge.

GAGE.--Water-stage recorder. Datum of gage is 750.00 ft National Geodetic Vertical Datum of 1929. (levels by State of Indiana).

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Cedarville Reservoir and some flow diverted into storage of Hurshtown Reservoir.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,020 ft³/s Feb. 15, gage height, 12.06 ft; minimum daily, 73 ft³/s Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96	147	2510	475	216	584	1500	1160	2760	184	159	128
2	93	175	1630	452	214	580	1130	1110	1830	199	166	158
3	90	211	1190	435	252	530	1390	914	1270	160	319	234
4	89	193	944	418	286	490	822	912	1010	162	326	194
5	88	179	953	406	306	460	2800	807	1190	163	434	151
6	86	176	2150	400	312	430	3900	788	851	170	481	154
7	82	188	3060	390	304	400	3120	719	1050	180	409	166
8	79	195	2910	378	290	380	2390	629	621	180	633	167
9	77	202	2550	366	280	374	1980	628	750	180	609	181
10	75	196	2310	352	320	368	1760	550	591	170	481	236
11	73	258	2130	334	810	361	1300	556	468	170	332	269
12	75	284	4210	322	4240	354	1100	577	437	160	243	269
13	107	270	5300	310	6150	347	1200	531	425	160	220	257
14	142	253	5100	292	6240	393	1180	469	396	150	204	334
15	153	257	4350	280	6710	430	1360	447	278	140	186	504
16	169	532	3700	274	5710	4550	3420	382	293	117	226	366
17	181	671	3250	266	5580	6410	4530	498	353	119	195	269
18	171	614	2670	260	5400	5200	4600	413	334	148	270	282
19	159	701	1960	240	4740	4130	3890	421	286	143	324	271
20	147	1110	1520	225	3660	4390	3290	813	298	143	200	198
21	135	1520	1110	198	2810	5800	2920	1530	273	148	169	203
22	158	1210	1430	204	2330	5580	2990	1270	250	145	165	187
23	240	1000	2160	225	1800	4200	4910	1810	274	130	167	171
24	294	1290	2040	254	1550	4100	4310	1450	278	229	132	173
25	282	1250	1530	262	1210	3580	3460	1540	225	397	106	177
26	260	1040	1140	256	920	3340	3090	4410	202	222	121	195
27	236	864	915	250	760	2800	2300	6120	221	170	158	264
28	206	2520	775	247	690	2710	2060	5470	228	202	140	562
29	178	3070	665	240	635	2310	1560	4570	206	182	104	476
30	162	2850	560	232	---	2120	1360	3890	181	148	117	289
31	153	---	510	224	---	1720	---	3300	---	166	122	---
TOTAL	4536	23226	67232	9467	64725	69511	75622	48684	17829	5337	7918	7485
MEAN	146	774	2169	305	2232	2242	2521	1570	594	172	255	250
MAX	294	3070	5300	475	6710	6410	4910	6120	2760	397	633	562
MIN	73	147	510	198	214	347	822	382	181	117	104	128
CFSM	.14	.73	2.05	.29	2.11	2.12	2.38	1.48	.56	.16	.24	.24
IN.	.16	.82	2.36	.33	2.27	2.44	2.65	1.71	.63	.19	.28	.26

WTR YR 1984 TOTAL 401572 MEAN 1097 MAX 6710 MIN 73 CFSM 1.04 IN 14.09

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04181500 ST. MARYS RIVER AT DECATUR, IN

LOCATION.--Lat 40°50'55", long 84°56'16", in SW¼ SW¼ sec.27, T.28 N., R.14 E., Adams County, Hydrologic Unit 04100004, on right bank '0 ft downstream from bridge on U.S. Highway 27, 0.5 mile upstream from Holthouse ditch, 1.3 miles north of Decatur, and at mile 29.1.

DRAINAGE AREA.--621 mi².

PERIOD OF RECORD.--October 1946 to current year. Monthly discharge only for some periods, published in WSP 1307. Gage-height records collected at site 0.5 mile upstream January 1932 to November 1954, and at present site thereafter are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1174: 1948. WSP 1337: 1947. WSP 1627: 1950. WSP 1912: 1955, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 760.44 ft National Geodetic Vertical Datum of 1929. Prior to July 27, 1948, nonrecording gage at same site and datum.

REMARKS.--Records fair. Flow regulated by Grand Lake. Slight diversion from or into Wabash River basin and into Miami and Erie Canal.

AVERAGE DISCHARGE.--38 years, 495 ft³/s, 10.82 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft³/s Feb. 10, 11, 1959; maximum gage height, 24.40 ft Mar. 14, 1982; minimum daily discharge, 5.4 ft³/s Oct. 18, 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,900 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 12	1800	3250	17.28	Mar. 26	0600	4030	17.93
Feb. 13	1200	3750	17.30	Apr. 6	1100	3560	16.86
Mar. 17	0700	4080	18.03	Apr. 23	2300	3660	17.08
Mar. 21	1100	*4480	*18.79				

Minimum daily discharge, 23 ft³/s Oct. 1, 2, 10, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	84	1600	154	65	330	941	525	545	91	40	25
2	23	67	1570	145	64	308	723	375	424	67	38	26
3	24	62	1210	138	76	294	582	320	316	56	47	37
4	27	60	1010	135	104	299	580	289	233	54	51	32
5	39	56	1400	128	147	322	1980	240	185	163	42	34
6	27	60	2280	125	200	396	3520	203	154	267	38	30
7	31	128	2540	117	153	402	3210	189	131	218	42	36
8	30	140	2020	108	130	372	2850	178	114	182	53	39
9	25	110	1760	102	118	342	2320	163	103	160	113	44
10	23	100	1500	95	138	318	1600	149	93	153	76	40
11	28	160	1470	90	640	297	988	143	84	125	59	36
12	29	394	3050	85	2400	284	694	206	74	104	59	34
13	49	309	2950	80	3700	274	564	287	100	81	62	31
14	40	342	2370	76	3280	269	455	249	303	60	87	30
15	33	488	1960	74	2730	277	522	236	214	49	106	31
16	23	1230	1610	73	2200	3100	1340	217	130	44	88	31
17	32	1100	1140	71	1780	3990	1230	192	101	39	68	29
18	71	721	833	68	1510	3400	1270	164	85	37	102	27
19	64	745	572	65	1370	3070	1550	145	76	34	48	25
20	55	900	450	62	1150	3610	1610	680	67	32	37	25
21	44	954	517	60	899	4430	1380	1680	59	31	33	25
22	98	818	637	64	749	4140	1770	938	54	30	36	25
23	162	702	654	73	639	3660	3500	909	54	31	37	28
24	205	879	500	79	538	3620	3580	791	162	59	34	32
25	210	741	390	78	485	3620	3540	639	227	47	27	34
26	213	604	340	76	430	3980	3500	1190	303	61	28	34
27	222	632	297	73	405	3560	3000	1040	383	91	30	34
28	198	2130	249	72	372	3070	1830	847	359	67	31	30
29	174	2360	204	70	353	2620	1010	1320	237	54	28	29
30	152	1770	178	68	---	1960	711	941	138	47	27	31
31	118	---	166	66	---	1330	---	669	---	44	24	---
TOTAL	2492	18846	37427	2770	26825	57944	52350	16114	5508	2578	1591	944
MEAN	80.4	628	1207	89.4	925	1869	1745	520	184	83.2	51.3	31.5
MAX	222	2360	3050	154	3700	4430	3580	1680	545	267	113	44
MIN	23	56	166	60	64	269	455	143	54	30	24	25
CFSM	.13	1.01	1.94	.14	1.49	3.01	2.81	.84	.30	.13	.08	.05
IN.	.15	1.13	2.24	.17	1.61	3.47	3.14	.97	.33	.15	.10	.06

CAL YR 1983 TOTAL 154088 MEAN 422 MAX 3630 MIN 20 CFSM .68 IN 9.23
WTR YR 1984 TOTAL 225389 MEAN 616 MAX 4430 MIN 23 CFSM .99 IN 13.50

04182000 ST. MARYS RIVER NEAR FORT WAYNE, IN

LOCATION.--Lat 40°59'16", long 85°06'03", in A. LaFontaine Reserve, T.29 N., R.12 E., Allen County, Hydrologic Unit 04100004, on left bank 130 ft downstream from Anthony Boulevard Extension, 0.8 mile downstream from Houk ditch, 5 miles south of Fort Wayne, and 10.8 miles upstream from mouth.

DRAINAGE AREA.--762 mi².

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1307. Fragmentary gage-height records for period November 1924 to October 1927 are available from the District Office.

REVISED RECORDS.--WSP 974: 1942. WSP 1337: 1933, 1947. WSP 1912: 1954, 1955, 1960, drainage area. WDR IN-82-1: 1973, 1974, 1978, 1979.

GAGE.--Water-stage recorder. Datum of gage is 748.97 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Apr. 13, 1939, nonrecording gage on upstream highway bridge at same datum.

REMARKS.--Records good, except those for winter period, which are fair. The flow is sometimes regulated by Grand Lake. Slight diversion from or into Wabash River basin and into Miami and Erie Canal. During extreme floods, some water bypasses gage and flows through Houk ditch and Paul Trier ditch in to the Maumee River.

AVERAGE DISCHARGE.--54 years, 578 ft³/s, 10.30 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,600 ft³/s Feb. 11, 1959; maximum gage height, 19.66 ft, Mar. 14, 1982; minimum daily discharge, 3.4 ft³/s Oct. 19, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 6	2400	4400	10.82	Mar. 22	0100	5720	12.57
Dec. 12	1600	5180	11.87	Mar. 26	0100	5310	12.04
Feb. 13	0500	ice jam	*14.09	Apr. 6	1700	4390	10.81
Feb. 13	1900	*6680	13.72	Apr. 24	0400	4510	10.98
Mar. 16	2400	5790	12.65				

Minimum daily discharge, 27 ft³/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	90	2060	187	88	390	1170	661	683	131	51	30
2	29	70	2040	174	86	365	873	483	550	92	47	32
3	27	62	1750	166	123	344	674	387	430	73	115	37
4	28	59	1380	162	178	320	614	347	325	67	176	44
5	36	54	1890	158	250	345	2140	298	253	66	77	38
6	50	52	3700	155	345	403	4310	244	206	239	53	39
7	38	68	4180	152	280	463	4080	210	172	265	45	38
8	38	132	3200	147	232	428	3430	196	148	218	47	42
9	38	135	2490	143	204	394	2860	179	130	178	108	47
10	35	119	2140	137	360	368	2040	163	118	165	128	52
11	30	129	2190	132	1620	342	1270	149	106	152	71	47
12	33	246	4950	126	4880	330	851	158	96	124	59	42
13	45	321	4890	116	5510	322	663	268	89	103	56	40
14	63	349	3930	112	5130	318	542	287	366	82	59	37
15	49	428	2740	109	3800	366	616	250	367	66	83	36
16	48	1400	2050	106	2990	4440	1580	235	220	58	92	37
17	38	1650	1450	102	2330	5600	1620	212	147	54	76	36
18	37	1090	1010	99	1940	4810	1510	181	118	50	77	36
19	73	928	880	91	1760	3750	1680	156	99	47	83	33
20	66	1110	665	83	1510	4330	1780	1200	88	44	48	31
21	58	1250	570	74	1160	5620	1590	2710	78	42	38	30
22	83	1150	640	80	928	5570	2430	1740	70	41	36	30
23	194	964	1140	91	769	4880	4220	1240	70	40	37	31
24	229	1110	856	97	637	4500	4440	1130	95	53	37	34
25	249	1090	670	102	570	4640	4160	813	239	90	35	38
26	309	844	470	100	520	5200	4040	1490	255	66	30	42
27	321	788	355	98	475	4810	3700	1420	369	115	29	43
28	314	2590	300	96	440	4080	2510	1220	408	156	32	43
29	268	3370	260	94	415	3300	1350	1660	332	86	33	40
30	193	2670	230	92	---	2520	897	1360	209	64	32	37
31	132	---	205	91	---	1680	---	890	---	55	30	---
TOTAL	3182	24318	55281	3672	39530	75228	63640	21937	6836	3082	1920	1142
MEAN	103	811	1783	118	1363	2427	2121	708	228	99.4	61.9	38.1
MAX	321	3370	4950	187	5510	5620	4440	2710	683	265	176	52
MIN	27	52	205	74	86	318	542	149	70	40	29	30
CFSM	.14	1.06	2.34	.16	1.79	3.19	2.78	.93	.30	.13	.08	.05
IN.	.16	1.19	2.70	.18	1.93	3.67	3.11	1.07	.33	.15	.09	.06

CAL YR 1983 TOTAL 203261 MEAN 557 MAX 5000 MIN 21 CFSM .73 IN 9.92
WTR YR 1984 TOTAL 299768 MEAN 819 MAX 5620 MIN 27 CFSM 1.08 IN 14.63

BEST COPY AVAILABLE

04182590 HARBER DITCH AT FORT WAYNE, IN

LOCATION.--Lat 41°00'27", long 85°10'58", in NE¼SW¼ sec.33, T.30 N., R.12 E., Allen County, Hydrologic Unit 04100004, on left bank 50 ft upstream from bridge on Baer Road in Fort Wayne, 3.2 miles upstream from mouth. The stream name changes to Fairfield ditch 0.7 mile downstream at bridge on Lower Huntington Road.

DRAINAGE AREA.--21.9 mi².

PERIOD OF RECORD.--May 1964 to current year. Discharge measurements available October 1960 to May 1964 and gage heights January 1961 to May 1964 at site 0.7 mile downstream.

REVISED RECORDS.--WDR IN-82-1: 1980 (P), 1981 (P).

GAGE.--Water-stage recorder. Datum of gage is 757.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--20 years, 18.2 ft³/s, 11.27 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 916 ft³/s June 13, 1981; maximum gage height, 12.25 ft Mar. 14, 1982; minimum daily discharge, 0.06 ft³/s Oct. 27, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 250 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 6	0845	284	6.42	Mar. 25	1945	422	7.54
Dec. 12	0200	647	9.32	Apr. 22	1645	329	6.79
Mar. 16	1100	*671	*9.50	May 20	1715	499	8.17
Mar. 20	1645	410	7.44				

Minimum daily discharge, 0.27 ft³/s Aug. 21, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.69	1.0	7.9	4.9	3.8	5.1	16	5.6	12	.85	.86	1.7
2	.52	3.5	6.0	4.7	4.5	4.9	13	5.9	9.1	.80	.76	6.5
3	.52	2.0	5.4	4.6	5.8	4.6	14	6.2	7.4	.97	1.7	2.8
4	.91	1.4	18	4.7	10	6.8	19	7.1	6.2	1.8	2.9	.85
5	2.1	1.1	23	5.0	17	12	131	5.1	5.6	1.3	1.3	.45
6	1.2	.93	246	5.3	14	9.6	105	4.0	4.9	1.6	.66	.34
7	1.0	.99	111	4.6	10	7.8	42	4.2	4.2	1.0	.52	2.2
8	1.9	1.1	32	4.1	7.9	6.7	24	4.2	3.6	.78	1.3	.73
9	1.6	.75	23	4.0	6.0	6.0	19	4.0	2.7	.88	.86	7.1
10	1.3	6.9	18	3.7	15	5.5	14	4.0	2.4	1.7	.65	1.4
11	1.0	14	148	3.7	120	5.1	12	4.4	2.4	2.1	.52	.81
12	2.6	5.6	477	3.4	180	4.8	12	4.6	4.0	.95	.43	.67
13	9.2	4.0	142	3.3	260	5.2	13	4.9	7.7	.70	.48	.52
14	2.9	3.3	80	3.3	120	6.1	10	4.4	5.6	.63	.60	.42
15	1.4	13	56	3.2	89	23	16	3.8	3.4	.62	.37	.41
16	1.1	16	27	3.2	68	586	34	3.8	2.4	.76	.40	.36
17	1.2	7.9	18	3.2	58	167	29	3.8	1.9	.76	.34	.36
18	1.2	5.2	14	3.0	52	78	30	4.0	1.9	.94	.35	.32
19	1.1	5.6	12	2.8	57	48	24	5.4	1.5	.61	.32	.31
20	1.6	6.5	11	2.7	39	221	18	209	1.5	.54	.37	.29
21	1.6	5.8	9.1	2.6	26	171	14	146	1.3	.52	.27	.35
22	23	4.7	18	2.9	20	107	146	83	1.3	.40	4.1	.39
23	2.6	12	14	3.3	16	91	126	66	4.6	.58	.68	.72
24	2.3	8.2	8.8	4.0	14	91	68	29	1.8	10	.44	.75
25	1.7	6.3	7.2	5.7	13	191	35	28	1.6	1.6	.36	1.2
26	1.5	4.7	6.5	6.6	11	150	22	125	1.3	4.5	.31	1.1
27	1.5	20	8.8	5.6	8.7	97	15	35	1.2	2.1	.27	.85
28	1.1	91	7.4	5.0	5.9	92	11	56	1.1	3.7	.43	.95
29	.70	24	6.6	4.5	5.4	51	8.7	68	1.3	4.5	.39	.67
30	.73	12	5.8	4.2	—	29	8.7	29	1.0	2.0	.37	.56
31	.77	—	5.2	4.0	—	20	—	17	—	1.2	.34	—
TOTAL	72.54	289.47	1572.7	125.8	1257.0	2303.2	1047.4	980.4	106.9	51.47	23.65	36.06
MEAN	2.34	9.65	50.7	4.06	43.3	74.3	34.9	31.6	3.56	1.66	.76	1.20
MAX	23	91	477	6.6	260	586	146	209	12	10	4.1	7.1
MIN	.52	.75	5.2	2.6	3.8	4.6	8.7	3.8	1.0	.48	.27	.29
CFSM	.11	.44	2.32	.19	1.98	3.39	1.59	1.44	.16	.08	.04	.06
IN.	.12	.49	2.67	.21	2.14	3.91	1.78	1.67	.18	.09	.04	.06

CAL YR 1983 TOTAL 5874.74 MEAN 16.1 MAX 477 MIN .47 CFSM .74 IN 9.98
WTR YR 1984 TOTAL 7866.59 MEAN 21.5 MAX 586 MIN .27 CFSM .98 IN 13.36

04182810 SPY RUN CREEK AT FORT WAYNE, IN

LOCATION.--Lat 41°06'18", long 85°09'12", in SW¼SW¼ sec.26, T.31 N., R.12 E., Allen County, Hydrologic Unit 04100004, on right bank 50 ft upstream from Sherman Boulevard bridge in Fort Wayne, and 2.2 miles above mouth.

DRAINAGE AREA.--14.0 mi².

PERIOD OF RECORD.--October 1983 to current year.

GAGE.--Water-stage Recorder. Datum of gage is 760.00 ft National Geodetic Verticle Datum of 1929 (levels by City of Fort Wayne).

REMARKS.--Record good, except those for winter periods, which are fair.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 14, 1982 reached a stage of 10.75 ft, present site and datum.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,150 ft³/s Mar. 16, gage height, 9.94 ft; minimum daily, 2.2 ft³/s July 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	8.4	8.3	3.1	3.6	4.0	10	4.5	7.7	2.7	3.9	16
2	3.5	12	7.0	3.5	5.0	3.9	9.1	4.3	6.4	2.7	7.7	16
3	3.6	9.5	6.5	3.8	30	3.9	15	4.1	5.7	3.2	14	29
4	4.5	6.7	40	3.9	18	5.0	26	7.7	5.0	3.0	6.2	5.2
5	5.2	5.9	30	4.0	10	6.8	152	6.1	4.6	2.8	4.0	3.7
6	4.2	5.4	175	4.0	6.6	6.2	66	4.6	4.3	4.4	3.6	3.3
7	4.2	6.6	43	3.9	5.6	5.1	37	4.3	4.0	2.7	3.5	12
8	5.4	8.4	23	3.8	5.3	4.8	20	4.7	3.8	2.3	3.5	4.3
9	4.7	8.2	17	3.7	4.7	4.7	14	4.7	3.6	2.3	3.6	35
10	4.4	15	16	3.5	31	4.5	10	4.7	3.4	2.8	3.5	8.9
11	4.5	36	176	3.4	135	4.3	9.2	4.8	3.2	2.8	3.5	4.4
12	5.9	11	247	3.5	115	4.0	8.8	4.6	3.4	2.5	3.4	3.6
13	28	6.9	43	3.6	150	3.9	12	4.5	6.0	2.4	3.3	3.4
14	8.9	5.8	33	3.6	51	6.3	9.6	4.5	7.2	2.2	3.3	3.3
15	4.8	26	24	3.5	33	52	11	4.3	3.8	4.2	3.3	3.3
16	3.9	39	13	3.5	24	564	23	4.2	3.6	2.6	3.3	3.1
17	3.8	11	8.3	3.4	20	69	20	4.1	3.6	5.4	3.3	3.1
18	3.8	7.2	6.9	3.4	16	33	15	4.0	3.5	4.8	3.3	3.2
19	3.9	62	5.6	3.3	17	24	13	5.0	3.5	2.6	3.4	3.1
20	4.8	29	4.8	3.1	12	173	11	246	3.3	2.7	3.3	3.3
21	4.6	16	4.3	3.1	9.1	77	9.6	131	3.1	2.6	3.2	3.2
22	68	8.0	6.3	3.2	7.8	48	99	83	3.1	2.4	7.6	2.9
23	17	33	5.1	3.5	6.9	38	68	77	12	2.5	3.7	3.3
24	14	20	4.0	4.3	6.2	33	26	24	3.3	134	3.5	3.4
25	8.3	8.3	3.3	4.8	5.9	76	18	30	3.0	19	3.2	6.0
26	6.2	6.4	3.3	5.6	5.0	57	14	248	3.0	29	3.1	4.9
27	5.5	39	3.6	4.7	4.9	40	11	28	3.0	19	3.0	4.2
28	6.3	182	3.8	4.3	4.4	40	8.4	42	3.0	6.7	3.2	3.7
29	9.0	27	3.6	4.0	4.1	23	6.9	34	3.0	4.1	3.3	3.3
30	8.4	13	3.4	3.9	---	16	5.6	17	2.9	3.6	3.2	3.1
31	8.2	---	3.3	3.6	---	13	---	11	---	3.4	3.1	---
TOTAL	271.5	672.7	971.4	116.5	747.1	1443.4	758.2	1060.7	129.0	287.4	127.0	205.2
MEAN	8.76	22.4	31.3	3.76	25.8	46.6	25.3	34.2	4.30	9.27	4.10	6.84
MAX	68	182	247	5.6	150	564	152	248	12	134	14	35
MIN	3.5	5.4	3.3	3.1	3.6	3.9	5.6	4.0	2.9	2.2	3.0	2.9
CFSM	.63	1.60	2.24	.27	1.84	3.33	1.81	2.44	.31	.66	.29	.49
IN.	.72	1.79	2.58	.31	1.99	3.84	2.01	2.82	.34	.76	.34	.55

WTR YR 1984 TOTAL 6790.1 MEAN 18.6 MAX 564 MIN 2.2 CFSM 1.33 IN 18.04

04183000 MAUMEE RIVER AT NEW HAVEN, IN

LOCATION.--Lat 41°05'06", long 85°01'20", in SE¼NE¼ sec.2, T.30 N., R.13 E., Allen County, Hydrologic Unit 04100005, on left bank 600 ft upstream from bridge on Landin Road, 1,400 ft upstream from the Norfolk and Western Railroad bridge, 1.1 miles northwest of New Haven, 2.8 miles upstream from Sixmile Creek and at mile 129.0.

DRAINAGE AREA.--1,967 mi².

PERIOD OF RECORD.--December 1946 to September 1956 (high-water records only), October 1956 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 724.51 ft National Geodetic Vertical Datum of 1929. Prior to Sept. 7, 1956, nonrecording gage and Sept. 7, 1956, to Sept. 14, 1965, water-stage recorder at site 500 ft downstream at same datum.

REMARKS.--Records good, except those for winter period, which are fair. Flow regulated by hydro-powerplant on the St. Joseph River 10.3 miles upstream from station. Flow slightly regulated by upstream reservoirs.

AVERAGE DISCHARGE.--28 years (1956 to current year), 1,663 ft³/s, 11.48 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,500 ft³/s Mar. 17, 1982, gage height, 25.49 ft; minimum daily, 48 ft³/s Oct. 6, 13, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 9,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 13	0300	10600	15.43	Mar. 22	0300	12200	17.13
Feb. 14	0500	*12900	17.73	Mar. 26	0400	10000	15.16
Mar. 17	1400	12600	17.50	Apr. 23	2000	10100	15.26

Minimum daily discharge, 74 ft³/s July 3; unusual regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	137	228	[illegible]	730	352	1070	3260	2270	4040	328	210	278
2	150	299	[illegible]	655	346	1010	2670	1840	2930	213	297	305
3	164	291	[illegible]	659	370	957	2340	1530	2120	74	471	605
4	245	231	3140	630	460	902	2290	1480	1580	99	720	285
5	104	183	2970	610	552	895	4610	1320	1580	213	605	213
6	124	185	6060	600	650	920	9060	1180	1820	345	631	174
7	136	187	7390	597	664	940	8380	1070	1300	466	461	252
8	106	190	6590	586	592	880	6760	982	920	378	725	213
9	115	257	5370	573	544	805	5760	922	870	386	819	503
10	120	319	4660	545	611	790	4640	681	758	274	698	408
11	116	808	4710	500	1650	765	3280	847	656	382	494	341
12	117	548	9350	475	6460	725	2580	741	536	333	345	317
13	352	642	10500	455	10500	760	2290	899	620	267	252	301
14	248	666	9450	435	12600	696	2150	881	714	241	252	282
15	181	905	7570	422	11700	810	2500	876	916	210	245	546
16	158	1960	6290	410	10200	8890	4910	709	672	252	282	412
17	194	2630	5310	398	8930	12500	7040	620	605	134	328	345
18	194	2130	4200	384	8380	11700	7020	672	522	230	274	270
19	183	1920	3000	362	7660	9430	6460	570	443	174	503	328
20	228	2400	2540	340	6200	9390	5880	3290	441	164	267	210
21	170	2840	2070	320	4920	11900	5330	5530	395	170	200	203
22	957	2680	1560	332	3890	12000	6010	4410	345	164	349	196
23	654	2470	2070	364	3060	10800	9670	3800	494	158	220	193
24	594	2680	3040	388	2710	9590	9760	3300	399	976	195	183
25	648	2630	2700	408	2180	9310	8660	2800	443	819	126	213
26	568	2180	2020	387	1720	9850	7790	6640	512	536	115	263
27	603	1950	1530	380	1430	9070	6790	8000	556	425	120	234
28	559	5060	1240	375	1260	8110	5680	7870	662	475	186	498
29	460	6990	1070	376	1170	6940	3660	7390	646	374	131	570
30	446	5840	915	372	---	5500	2690	6300	461	263	117	313
31	360	---	800	362	---	4330	---	4980	---	186	115	---
TOTAL	9401	52295	130175	14465	111591	162235	159740	84600	28964	9709	10754	9454
MEAN	303	1743	4199	467	3848	5233	5325	2729	965	313	347	315
MAX	957	6990	10500	730	12600	12500	9760	8000	4040	976	819	605
MIN	104	183	800	320	346	696	2150	570	345	74	115	174
CFSM	.15	.89	2.14	.24	1.96	2.66	2.71	1.39	.49	.16	.18	.16
IN.	.18	.99	2.46	.27	2.11	3.07	3.02	1.60	.55	.18	.20	.18

CAL YR 1983 TOTAL 644582 MEAN 1766 MAX 13300 MIN 99 CFSM .90 IN 12.19
WTR YR 1984 TOTAL 783383 MEAN 2140 MAX 12600 MIN 74 CFSM 1.09 IN 14.82

05515000 KANKAKEE RIVER NEAR NORTH LIBERTY, IN

LOCATION.--Lat 41°33'50", long 86°29'50", in NW¼NW¼ sec.23, T.36 N., R.1 W., St. Joseph County, Hydrologic Unit 07120001, on left bank at downstream side of bridge on county highway named " New Road", 2.7 miles upstream from Little Kankakee River, 4 miles northwest of North Liberty, and at mile 126.9.

DRAINAGE AREA.--174 mi², of which 58.2 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--January 1951 to current year.

REVISED RECORDS.--WSP 1915: 1952, 1956-59. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 680.04 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to June 26, 1956, nonrecording gage at same site and datum.

REMARKS.--Records good below 250 cfs and fair above due to varying backwater conditions.

AVERAGE DISCHARGE.--33 years, 151 ft³/s, 11.78 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 908 ft³/s Mar. 17, 1982, gage height, 9.01 ft; maximum gage height, 9.04 ft June 27, 1968; minimum daily discharge, 46 ft³/s Sept. 9, 10, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 534 ft³/s Feb. 13, gage height, 6.03 ft; minimum daily, 63 ft³/s Aug. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	108	139	116	107	149	167	188	201	150	87	68
2	102	110	133	117	108	151	162	180	188	142	86	67
3	102	113	127	118	124	153	160	176	180	134	88	65
4	103	114	126	118	126	151	172	183	173	144	101	73
5	104	114	123	118	124	149	170	193	166	131	100	77
6	103	112	154	118	121	145	165	180	158	129	91	74
7	99	111	171	116	120	142	159	172	157	134	132	77
8	102	110	159	116	118	140	154	166	157	129	138	76
9	102	109	150	116	118	139	152	165	173	121	118	76
10	102	110	141	115	120	137	149	162	171	121	112	88
11	103	110	147	114	131	137	146	160	161	141	107	88
12	107	109	241	113	207	134	148	156	151	142	100	85
13	110	108	242	113	475	134	164	153	152	128	97	85
14	112	108	219	113	489	133	155	151	162	122	94	88
15	107	108	211	112	391	138	164	149	152	121	90	89
16	102	107	189	112	325	235	190	145	159	114	82	88
17	99	106	173	112	288	256	209	143	153	110	77	88
18	98	106	163	111	261	209	211	141	144	107	87	87
19	97	107	156	96	248	193	201	142	140	106	84	85
20	100	107	150	100	231	215	192	155	136	114	77	83
21	103	109	148	109	214	248	182	167	133	117	73	81
22	111	108	143	111	202	246	219	163	150	108	73	80
23	118	110	141	112	193	228	388	244	261	95	71	83
24	115	113	140	110	184	235	342	219	283	97	71	86
25	114	112	134	108	176	227	286	205	224	97	71	113
26	115	110	130	108	169	215	244	378	192	111	71	140
27	114	110	127	108	164	206	219	340	182	114	64	123
28	114	161	124	107	151	202	201	279	171	108	63	115
29	110	169	122	109	144	192	193	285	159	102	63	111
30	109	151	119	107	---	180	197	250	154	93	67	107
31	106	---	117	107	---	173	---	222	---	88	67	---
TOTAL	3287	3440	4759	3460	5829	5592	5861	6012	5143	3670	2702	2646
MEAN	106	115	154	112	201	180	195	194	171	118	87.2	88.2
MAX	118	169	242	118	489	256	388	378	283	150	138	140
MIN	97	106	117	96	107	133	146	141	133	88	63	65
CFSM	.61	.66	.89	.64	1.16	1.03	1.12	1.12	.98	.68	.50	.51
IN.	.70	.74	1.02	.74	1.25	1.20	1.25	1.29	1.10	.78	.58	.57

CAL YR 1983 TOTAL 60728 MEAN 166 MAX 685 MIN 65 CFSM .95 IN 12.98
WTR YR 1984 TOTAL 52401 MEAN 143 MAX 489 MIN 63 CFSM .82 IN 11.20

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05515400 KINGSBURY CREEK NEAR LAPORTE, IN

LOCATION.--Lat 41°32'49", long 86°43'48", in NW¼SE¼ sec.23, T.36 N., R.3 W., LaPorte County, Hydrologic Unit 07120001, on left bank at upstream side of bridge on County Road 400 South, 0.5 mile east of State Highway 39, 1.5 miles west of U.S. Highway 35, and 3 miles south of LaPorte city limits.

DRAINAGE AREA.--7.08 mi², of which 4.07 mi² does not contribute directly to surface run-off.

PERIOD OF RECORD.--October 1970 to current year.

REVISED RECORDS.--WDR IN-83-1: 1981 (P).

GAGE.--Water-stage recorder. Datum of gage is 753.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--14 years, 4.21 ft³/s, 8.08 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 306 ft³/s July 26, 1981, gage height, 6.83 ft from rating curve extended above 20 ft³/s on the basis of contracted-opening measurement at gage height 6.18 ft; minimum daily, 0.83 ft³/s Dec. 3, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 30 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
June 23	0100	*188	*6.35

Minimum daily discharge, 2.2 ft³/s Dec. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	2.5	3.1	2.4	2.4	3.8	4.3	5.1	5.5	5.0	3.3	2.7
2	2.7	2.6	2.9	2.5	2.4	3.8	4.3	4.9	5.2	4.9	3.2	2.8
3	2.6	2.8	2.7	2.6	2.7	3.6	4.7	4.9	5.0	4.9	3.3	2.9
4	2.6	2.7	2.9	2.8	2.8	3.6	6.1	6.1	4.9	4.9	3.3	2.7
5	2.6	2.6	3.0	2.8	2.8	3.7	5.5	5.8	4.7	4.9	3.2	2.7
6	2.5	2.6	4.6	2.8	2.7	3.7	4.9	5.3	4.5	4.9	3.1	2.6
7	2.5	2.6	3.8	2.7	2.6	3.5	4.6	5.0	4.4	4.7	3.1	2.7
8	2.5	2.5	3.3	2.7	2.5	3.5	4.3	4.8	4.5	4.5	3.1	2.6
9	2.5	2.5	3.1	2.5	2.5	3.4	4.2	4.7	10	4.6	3.9	2.7
10	2.5	2.5	2.9	2.5	2.5	3.4	4.1	4.7	6.5	4.6	7.1	3.1
11	2.5	2.6	4.3	2.5	2.6	3.3	3.9	4.6	5.5	6.9	3.9	2.9
12	2.6	2.7	7.1	2.5	5.7	3.2	4.3	4.4	5.1	5.1	3.5	2.7
13	2.7	2.6	4.9	2.5	16	3.2	5.6	4.3	4.9	4.8	3.2	2.7
14	2.7	2.5	4.5	2.5	8.0	3.2	5.0	4.3	5.2	4.4	3.1	2.8
15	2.7	2.5	4.4	2.5	5.7	3.4	5.2	4.2	4.9	4.3	2.9	3.1
16	2.6	2.7	3.8	2.5	5.1	7.9	5.5	4.1	5.2	4.1	2.9	2.9
17	2.5	2.9	3.4	2.5	5.4	5.8	5.5	4.0	5.3	4.0	3.0	2.7
18	2.5	2.7	3.1	2.4	5.1	5.0	5.7	3.9	4.8	3.7	3.1	2.6
19	2.5	2.7	2.9	2.5	5.3	4.8	5.3	3.8	4.5	3.6	2.9	2.6
20	2.5	2.8	2.8	2.4	4.9	9.0	4.9	5.8	4.3	3.6	2.8	2.5
21	2.7	2.8	2.7	2.4	4.7	7.4	4.7	5.8	4.3	3.8	2.7	2.5
22	3.4	2.8	2.6	2.3	4.5	6.3	13	8.5	8.5	3.7	2.7	2.4
23	3.4	3.1	2.5	2.3	4.3	5.6	9.9	11	55	3.5	2.7	2.8
24	3.1	3.4	2.4	2.4	4.3	5.8	7.6	6.7	11	3.7	2.6	2.9
25	2.9	2.9	2.2	2.4	4.1	5.5	6.3	7.3	7.0	3.7	2.6	2.8
26	2.8	2.7	2.3	2.4	3.9	5.4	5.9	12	6.0	4.3	2.5	2.7
27	2.7	3.1	2.4	2.4	3.8	5.4	5.7	6.8	6.1	4.2	2.5	2.7
28	2.7	6.9	2.5	2.4	3.9	5.4	5.4	8.3	5.5	3.7	2.6	2.7
29	2.5	4.1	2.6	2.5	3.8	5.2	5.2	8.8	5.3	3.5	2.5	2.6
30	2.5	3.4	2.5	2.5	---	4.9	5.3	6.6	5.2	3.4	2.5	2.6
31	2.5	---	2.4	2.4	---	4.6	---	5.9	---	3.3	2.4	---
TOTAL	82.7	87.6	100.6	77.5	127.0	146.3	166.9	182.2	218.8	133.2	96.2	81.7
MEAN	2.67	2.92	3.25	2.50	4.38	4.72	5.56	5.88	7.29	4.30	3.10	2.72
MAX	3.4	6.9	7.1	2.8	16	9.0	13	12	55	6.9	7.1	3.1
MIN	2.5	2.5	2.2	2.3	2.4	3.2	3.9	3.8	4.3	3.3	2.4	2.4
CFSM	.38	.41	.46	.35	.62	.67	.79	.83	1.03	.61	.44	.38
IN.	.43	.46	.53	.41	.67	.77	.88	.96	1.15	.70	.51	.43

CAL YR 1983 TOTAL 1703.4 MEAN 4.67 MAX 26 MIN 2.0 CFSM .66 IN 8.95
WTR YR 1984 TOTAL 1500.7 MEAN 4.10 MAX 55 MIN 2.2 CFSM .58 IN 7.86

05515500 KANKAKEE RIVER AT DAVIS, IN

LOCATION.--Lat 41°24'00", long 86°42'04", in SE¼NE¼ sec.13, T.34 N., R.3 W., Starke County, Hydrologic Unit 07120001, on left bank at downstream side of bridge on U.S. Highway 30 at Davis, 0.5 mile downstream from Mill Creek, 4 miles east of Hanna, and at mile 110.9.

DRAINAGE AREA.--537 mi², of which 137 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--July 1905 to July 1906 and October 1924 to current year. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORDS.--WSP 1338: 1953. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 664.68 ft National Geodetic Vertical Datum of 1929. July 13, 1905, to July 21, 1906, nonrecording gage at site 50 ft downstream at different datum. July 28, 1925, to May 18, 1929, nonrecording gage on bridge 0.5 mile downstream at different datum. Apr. 19, 1931, to Nov. 3, 1953, nonrecording gage at present site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--60 years, (1924 to current year), 503 ft³/s, 12.72 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,920 ft³/s Mar. 20, 1982; maximum gage height, 12.98 ft Mar. 17, 1982; minimum daily discharge, 154 ft³/s Aug. 30 to Sept. 3, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,200 ft³/s Feb. 14; gage height, 11.45 ft; minimum daily, 243 ft³/s Aug. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	369	357	465	405	364	517	737	722	842	574	340	251
2	371	360	444	400	364	524	703	698	784	554	330	262
3	371	369	429	404	391	529	698	669	737	529	332	276
4	377	368	424	410	394	534	752	685	684	521	343	274
5	379	364	424	416	394	520	765	718	666	514	360	270
6	379	361	482	414	396	511	742	705	637	504	341	271
7	381	360	551	408	405	497	705	669	611	492	344	282
8	378	357	532	402	404	487	672	638	594	477	382	282
9	378	355	506	398	405	480	639	620	638	467	364	286
10	378	354	480	395	405	476	612	610	652	462	394	353
11	378	357	489	389	431	476	593	598	604	507	392	347
12	385	360	695	384	596	463	582	584	572	535	355	320
13	398	357	778	378	1040	463	631	566	561	503	333	309
14	397	354	735	385	1200	463	646	560	615	474	320	317
15	371	353	710	368	1140	476	646	543	604	456	307	329
16	348	361	685	384	1050	767	702	524	592	447	291	324
17	344	367	623	384	973	990	775	512	597	430	285	314
18	335	358	568	365	917	925	787	503	570	416	289	306
19	330	357	558	340	877	851	765	502	544	400	289	302
20	332	365	540	360	831	875	735	582	524	400	280	299
21	340	368	526	375	785	973	707	683	511	410	272	287
22	376	362	518	385	740	968	772	695	545	409	265	282
23	405	372	509	392	708	932	1070	837	829	389	256	289
24	395	389	495	388	680	921	1110	894	1020	381	260	307
25	381	384	474	382	646	914	1030	824	969	392	259	315
26	372	375	462	374	612	917	943	1030	836	398	257	360
27	367	378	450	368	593	903	870	1140	746	437	250	362
28	365	486	438	364	568	880	807	1070	685	415	250	348
29	364	549	428	365	529	841	755	1050	635	386	248	341
30	358	506	420	362	---	797	723	1000	598	367	244	333
31	362	---	410	364	---	760	---	915	---	353	243	---
TOTAL	11464	11363	16248	11908	18838	21630	22674	22346	20012	13999	9475	9198
MEAN	370	379	524	384	650	698	756	721	667	452	306	307
MAX	405	549	778	416	1200	990	1110	1140	1020	574	394	362
MIN	330	353	410	340	364	463	582	502	511	353	243	251
CFSM	.69	.71	.98	.72	1.21	1.30	1.41	1.34	1.24	.84	.57	.57
IN.	.79	.79	1.13	.82	1.30	1.50	1.57	1.55	1.39	.97	.66	.64

CAL YR 1983 TOTAL 216608 MEAN 593 MAX 1720 MIN 284 CFSM 1.10 IN 15.01
WTR YR 1984 TOTAL 189155 MEAN 517 MAX 1200 MIN 243 CFSM .96 IN 13.10

05516500 YELLOW RIVER AT PLYMOUTH, IN

LOCATION.--Lat 41°20'25", long 86°18'16", in SE¼NW¼ sec.13, T.33 N., R.2 E., Marshall County, Hydrologic Unit 07120001, on left bank 50 ft upstream from LaPorte Street footbridge in Plymouth, 1.1 miles downstream from Elmer Seltenright (formerly Baker) ditch, 8.1 miles upstream from Wolf Creek, and at mile 40.3.

DRAINAGE AREA.--294 mi², of which 22 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--July 1948 to current year.

REVISED RECORDS.--WSP 1338: 1950-51. WSP 2115: Drainage area. WDR IN-73-1: 1972(M).

GAGE.--Water-stage recorder. Datum of gage is 764.78 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Aug. 27, 1959, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--36 years, 258 ft³/s, 11.92 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,390 ft³/s Oct. 12, 13, 1954, gage height, 17.13 ft; minimum daily, 13 ft³/s Dec. 3, 7, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,050 ft³/s Feb. 15, gage height, 12.19 ft; minimum daily, 34 ft³/s Oct. 7, 10, 11, Aug. 31, Sept. 20-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	40	110	88	61	152	309	238	340	145	73	39
2	37	43	93	88	68	152	277	214	288	133	82	41
3	37	43	86	89	110	158	265	205	260	124	85	38
4	36	43	87	89	158	158	342	219	217	120	84	38
5	36	41	98	89	171	152	391	242	197	118	82	37
6	35	41	245	87	145	142	354	222	181	114	75	36
7	34	40	352	85	120	135	298	203	166	105	70	39
8	35	40	245	83	115	125	260	187	157	96	72	38
9	35	39	193	81	115	120	243	175	148	93	72	43
10	34	39	169	79	124	115	225	169	140	91	68	56
11	34	39	217	77	203	112	208	158	129	107	66	52
12	37	39	704	75	640	110	202	152	124	110	63	43
13	39	37	950	73	1200	110	225	144	151	97	59	39
14	39	42	878	70	1710	127	229	138	329	92	57	41
15	39	47	615	67	2020	144	222	129	272	85	50	43
16	37	47	397	65	1910	715	373	123	194	78	49	40
17	37	50	277	63	1450	1220	669	116	179	76	48	38
18	37	50	216	61	1040	1390	613	115	169	75	48	36
19	37	50	180	59	732	1080	485	116	149	74	45	36
20	36	52	160	58	548	843	385	190	133	72	44	34
21	36	50	140	57	425	1060	324	346	122	75	42	34
22	62	50	120	57	354	1240	361	324	134	74	43	34
23	82	56	110	59	311	1090	718	550	604	71	42	34
24	69	60	100	61	277	896	816	595	974	70	42	34
25	58	57	92	65	245	826	606	407	896	75	42	36
26	50	55	92	67	217	848	425	816	483	81	41	71
27	46	73	94	67	200	861	350	1130	274	100	39	78
28	44	188	95	66	165	787	304	1140	214	95	36	56
29	42	225	92	63	164	671	260	871	181	88	37	45
30	41	148	89	61	---	468	253	671	159	75	37	42
31	41	---	88	60	---	359	---	440	---	72	34	---
TOTAL	1299	1824	7384	2209	14998	16366	10992	10745	7964	2881	1727	1271
MEAN	41.9	60.8	238	71.3	517	528	366	347	265	92.9	55.7	42.4
MAX	82	225	950	89	2020	1390	816	1140	974	145	85	78
MIN	34	37	86	57	61	110	202	115	122	70	34	34
CFSM	.14	.21	.81	.24	1.76	1.80	1.25	1.18	.90	.32	.19	.14
IN.	.16	.23	.93	.28	1.90	2.07	1.39	1.36	1.01	.36	.22	.16

CAL YR 1983 TOTAL 92386 MEAN 253 MAX 2240 MIN 30 CFSM .86 IN 11.69
WTR YR 1984 TOTAL 79660 MEAN 218 MAX 2020 MIN 34 CFSM .74 IN 10.08

05517000 YELLOW RIVER AT KNOX, IN

LOCATION.--Lat 41°18'10", long 86°37'14", in SW¼SW¼ sec.14, T.33 N., R.2 W., Starke County, Hydrologic Unit 07120001, on right bank 40 ft upstream from bridge on U.S. Highway 35 in Knox, 1.4 miles downstream from Eagle Creek, and at mile 11.6.

DRAINAGE AREA.--435 mi², of which 51 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--August 1905 to July 1906, August 1943 to current year.

REVISED RECORDS.--WSP 1278: 1952. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 679.93 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). August 1905 to July 1906, nonrecording gage at same site at different datum. August 1943 to July 17, 1952, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--41 years (water years 1944 to current year), 394 ft³/s , 12.30 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,660 ft³/s Oct. 15, 16, 1954, gage height, 13.75 ft; minimum daily, 50 ft³/s Jan. 21-31, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,980 ft³/s Feb. 17, gage height, 8.63 ft; minimum daily, 106 ft³/s Aug. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	122	278	220	160	325	594	453	686	329	197	110
2	125	123	232	220	175	333	540	426	565	303	189	118
3	124	125	210	220	200	333	511	405	498	285	184	117
4	124	124	205	220	250	329	541	405	453	282	184	117
5	124	139	212	220	303	329	615	439	405	274	184	116
6	121	137	266	220	316	325	628	444	368	264	134	111
7	118	131	410	215	260	303	573	409	345	253	180	117
8	119	128	469	215	240	292	514	385	325	232	172	119
9	123	126	397	205	250	285	475	360	310	226	165	123
10	119	126	340	200	264	265	453	345	296	219	162	145
11	120	128	332	195	280	260	434	333	282	229	161	153
12	122	126	512	190	463	255	415	322	271	239	158	145
13	125	125	779	185	968	256	432	318	278	236	149	135
14	129	125	937	180	1380	253	447	303	409	226	144	130
15	126	127	969	170	1670	296	439	296	512	219	140	133
16	124	139	791	165	1920	654	470	282	448	206	137	133
17	124	153	582	155	1970	918	659	271	397	200	136	128
18	125	149	473	150	1760	1130	825	267	360	191	136	123
19	123	151	420	150	1300	1410	805	264	325	187	136	121
20	123	151	370	145	1000	1470	699	310	296	181	133	118
21	125	150	330	145	772	1250	603	435	271	181	128	115
22	148	147	300	145	627	1290	586	531	285	181	126	114
23	197	149	270	150	550	1450	727	565	606	171	123	112
24	191	158	250	155	507	1400	899	709	957	168	117	113
25	181	158	235	165	471	1190	968	742	1100	184	115	117
26	173	154	230	170	435	1120	824	808	1070	200	114	121
27	161	159	235	170	414	1100	659	1010	756	216	113	142
28	143	225	235	165	393	1090	575	1210	507	229	115	164
29	130	323	230	160	341	1000	517	1350	418	229	113	143
30	125	334	225	155	---	882	475	1140	364	225	109	129
31	123	---	220	155	---	710	---	899	---	208	106	---
TOTAL	4164	4612	11944	5575	19639	22503	17902	16436	14163	6973	4510	3782
MEAN	134	154	385	180	677	726	597	530	472	225	145	126
MAX	197	334	969	220	1970	1470	968	1350	1100	329	197	164
MIN	118	122	205	145	160	253	415	264	271	168	106	110
CFSM	.31	.35	.89	.41	1.56	1.67	1.37	1.22	1.09	.52	.33	.29
IN.	.36	.39	1.02	.48	1.68	1.92	1.53	1.41	1.21	.60	.39	.32

CAL YR 1983 TOTAL 152803 MEAN 419 MAX 2330 MIN 107 CFSM .96 IN 13.07
WTR YR 1984 TOTAL 132203 MEAN 361 MAX 1970 MIN 106 CFSM .83 IN 11.31

05517500 KANKAKEE RIVER AT DUNNS BRIDGE, IN

LOCATION.--Lat 41°13'17", long 86°57'52", in NE¼SW¼ sec.15, T.32 N., R.5 W., Jasper County, Hydrologic Unit 07120001, on left bank at downstream side of abandoned bridge at Dunns Bridge, 1.8 miles north of Tefft, 3.6 miles upstream from Davis ditch, and at mile 90.8.

DRAINAGE AREA.--1,352 mi², of which 192 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--July 1948 to current year.

REVISED RECORDS.--WSP 1728: 1954(m). WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 649.65 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to July 17, 1956, nonrecording gage at same site and datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--36 years, 1,326 ft³/s, 13.32 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,870 ft³/s Mar. 23, 1982; maximum gage height, 13.38 ft Mar. 20, 1982; minimum daily discharge, 280 ft³/s Jan. 25-29, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,320 ft³/s Feb. 19; gage height, 10.16 ft; minimum daily, 440 ft³/s Aug. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	687	698	1130	1070	840	1520	2590	2110	2950	1580	790	447
2	690	690	1100	1040	835	1500	2430	2010	2720	1480	771	468
3	682	690	1050	1010	825	1480	2320	1930	2460	1390	773	475
4	682	682	1040	980	810	1470	2300	1890	2240	1330	790	480
5	684	684	1030	960	800	1430	2300	1880	2050	1300	809	473
6	684	690	1110	950	795	1400	2280	1870	1900	1270	807	466
7	703	692	1290	940	805	1360	2200	1850	1790	1230	773	475
8	658	698	1470	920	820	1330	2120	1770	1680	1170	784	475
9	653	695	1460	910	850	1290	2040	1680	1630	1120	793	470
10	645	690	1370	900	895	1260	1950	1630	1580	1090	762	552
11	648	690	1350	880	990	1260	1840	1610	1520	1100	784	656
12	677	687	1550	840	1350	1230	1820	1570	1450	1160	752	630
13	666	685	1870	800	2100	1210	1830	1520	1410	1150	716	602
14	658	676	2070	760	2590	1200	1820	1500	1530	1100	692	607
15	653	678	2170	730	2860	1220	1820	1470	1610	1040	665	620
16	638	690	2180	690	3000	1600	1850	1400	1640	1010	645	627
17	627	692	2090	670	3170	2140	1940	1370	1600	967	631	609
18	627	692	1960	655	3280	2420	2100	1330	1550	932	625	594
19	617	695	1790	640	3310	2610	2210	1350	1470	891	627	582
20	625	708	1600	625	3170	2860	2220	1450	1380	869	609	574
21	627	732	1490	600	2940	3040	2130	1720	1320	869	587	562
22	677	724	1420	585	2690	3090	2150	1870	1370	866	572	547
23	754	727	1370	590	2460	3100	2430	2070	1720	843	552	544
24	776	754	1330	595	2290	3150	2670	2220	2090	823	533	557
25	757	754	1310	610	2140	3190	2800	2370	2330	857	523	567
26	735	746	1280	645	2020	3200	2850	2510	2450	871	510	577
27	733	760	1230	680	1910	3170	2770	2730	2480	920	497	609
28	719	917	1180	725	1770	3120	2600	2880	2260	941	477	625
29	719	1120	1140	770	1600	3040	2410	3040	1950	906	464	609
30	714	1150	1120	800	---	2930	2240	3130	1740	860	456	597
31	700	---	1090	825	---	2790	---	3100	---	823	440	---
TOTAL	21115	22186	44640	24395	53915	65610	67030	60810	55850	32758	20207	16676
MEAN	681	740	1440	787	1859	2116	2234	1962	1862	1057	652	556
MAX	776	1150	2180	1070	3310	3200	2850	3130	2950	1580	809	656
MIN	617	676	1030	585	795	1200	1820	1330	1320	823	440	447
CFSM	.50	.55	1.07	.58	1.38	1.57	1.65	1.45	1.38	.76	.48	.41
IN.	.58	.61	1.23	.67	1.48	1.81	1.84	1.67	1.54	.90	.56	.46

CAL YR 1983 TOTAL 569869 MEAN 1561 MAX 4460 MIN 605 CFSM 1.16 IN 15.68
WTR YR 1984 TOTAL 485192 MEAN 1326 MAX 3310 MIN 440 CFSM .98 IN 13.35

05517530 KANKAKEE RIVER NEAR KOUTS, IN

LOCATION.--Lat 41°15'14", long 87°02'02", in SW¼NE¼ sec.6, T.32 N., R.5 W., Jasper County, Hydrologic Unit 07120001, on left bank, 20 ft downstream from bridge on State Highway 49, 4.5 miles south of Kouts, 0.7 mile upstream from Cook ditch, and at mile 86.7.

DRAINAGE AREA.--1,376 mi², of which 194 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1974 to current year.

REVISED RECORDS.--WDR IN-77-1: 1975(M).

GAGE.--Water-stage recorder. Datum of gage is 645.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--10 years, 1,480 ft³/s, 14.61 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,420 ft³/s Mar. 24, 1982, gage height, 14.52 ft; minimum daily, 335 ft³/s Sept. 12, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,470 ft³/s Feb. 19, gage height, 10.96 ft; minimum daily, 415 ft³/s Aug. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	625	606	1170	1080	850	1620	2770	2230	3090	1670	741	435
2	636	595	1130	1050	850	1580	2620	2130	2870	1560	706	456
3	616	595	1060	1020	840	1550	2480	2060	2620	1470	712	480
4	598	616	1020	995	825	1560	2480	2010	2400	1410	744	486
5	556	616	1040	980	810	1520	2470	1970	2200	1390	766	470
6	590	604	1100	960	800	1500	2450	1950	2030	1360	769	500
7	581	604	1300	945	815	1470	2350	1890	1970	1330	715	512
8	573	636	1510	935	840	1470	2260	1800	1840	1200	691	498
9	573	674	1520	925	875	1410	2260	1770	1760	1140	706	476
10	558	616	1410	910	910	1350	2160	1710	1660	1090	712	488
11	587	625	1420	890	1010	1340	2040	1700	1620	1100	715	628
12	595	631	1650	865	1410	1310	2020	1660	1560	1170	688	590
13	584	631	1910	815	2300	1260	2010	1560	1490	1240	700	525
14	618	621	2140	770	2780	1270	1950	1620	1580	1160	697	531
15	609	688	2260	730	3010	1290	1940	1610	1650	1060	604	584
16	582	741	2270	710	3180	1710	1990	1500	1690	999	570	593
17	560	712	2150	685	3270	2210	2060	1450	1670	1010	522	561
18	548	700	1920	665	3400	2500	2120	1380	1620	939	528	536
19	533	679	1720	640	3450	2710	2190	1420	1580	841	573	573
20	533	631	1610	620	3290	3010	2270	1520	1520	801	542	567
21	550	663	1500	605	3070	3230	2320	1800	1420	814	544	550
22	601	648	1430	600	2850	3290	2300	1990	1500	828	533	550
23	685	610	1390	600	2620	3280	2550	2300	1930	785	514	500
24	719	672	1350	615	2440	3340	2830	2390	2230	737	487	461
25	703	747	1330	640	2250	3390	2970	2460	2440	785	445	492
26	672	747	1310	675	2160	3430	3000	2720	2530	814	427	503
27	663	715	1260	705	2040	3400	2920	2900	2560	874	422	561
28	646	864	1200	750	1880	3330	2730	3010	2370	878	445	590
29	631	1130	1170	790	1680	3200	2560	3230	2090	861	445	533
30	620	1200	1130	820	---	3110	2380	3290	1870	834	430	556
31	601	---	1110	845	---	2970	---	3240	---	788	415	---
TOTAL	18746	20817	45490	24835	56505	69610	71450	64290	59360	32938	18508	15785
MEAN	605	694	1467	801	1948	2245	2382	2074	1979	1063	597	526
MAX	719	1200	2270	1080	3450	3430	3000	3290	3090	1670	769	628
MIN	533	595	1020	600	800	1260	1940	1380	1420	737	415	435
CFSM	.44	.50	1.07	.58	1.42	1.63	1.73	1.51	1.44	.77	.43	.38
IN.	.51	.56	1.23	.67	1.53	1.88	1.93	1.74	1.60	.89	.50	.43

CAL YR 1983 TOTAL 569639 MEAN 1561 MAX 4210 MIN 495 CFSM 1.13 IN 15.40
WTR YR 1984 TOTAL 498334 MEAN 1362 MAX 3450 MIN 415 CFSM .99 IN 13.47

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05517890 COBB DITCH NEAR KOUTS, IN

LOCATION.--Lat 41°20'19", long 87°04'30", in NW¼SE¼ sec. 2, T.33 N., R.6 W., Porter County, Hydrologic Unit 07120001, on left bank 15 ft upstream from bridge on County Road 50 West, 1.6 miles upstream from mouth, and 3 miles northwest of Kouts.

DRAINAGE AREA.--30.3 mi².

PERIOD OF RECORD.--July 1968 to current year. Prior to October 1971, published as State ditch near Kouts.

GAGE.--Water-stage recorder. Datum of gage is 652.00 ft National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark). Prior to Oct. 19, 1978, water-stage recorder at site 1.4 miles downstream at same datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--16 years, 33.6 ft³/s, 15.06 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 777 ft³/s Mar. 5, 1976, from flood mark at site then in use; maximum gage height at present site, 17.71 ft Mar. 13, 1982 (backwater from ice); minimum daily discharge, 8.9 ft³/s Sept. 11, 12, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 300 ft³/s (revised) and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 13	0200	432	14.10	May 26	0500	327	12.91
Mar. 20	1900	316	12.77	May 28	2000	365	13.34
May 23	0600	*531	*15.19				

Minimum daily discharge, 14.0 ft³/s Aug. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	16	27	20	20	22	37	31	54	26	20	18
2	17	17	25	21	21	23	34	30	46	26	19	16
3	16	16	24	22	22	24	36	29	40	25	20	16
4	16	16	24	22	21	26	49	38	37	25	19	15
5	16	16	25	22	22	24	43	36	35	24	19	15
6	16	17	52	22	23	23	37	32	33	24	19	15
7	16	17	42	22	23	22	33	29	31	23	18	15
8	16	16	31	21	22	22	31	28	31	23	18	15
9	16	17	28	21	22	22	29	27	96	23	18	16
10	15	17	27	21	22	21	27	26	53	22	30	19
11	15	17	58	21	25	21	26	26	36	90	19	15
12	17	18	180	20	190	20	27	25	31	37	18	15
13	17	17	75	19	352	20	36	25	33	29	18	15
14	16	17	70	19	141	20	34	24	31	26	18	15
15	16	18	82	19	93	26	34	24	28	25	17	16
16	16	20	47	19	78	206	48	23	34	24	17	16
17	16	20	38	19	71	81	50	23	29	23	32	15
18	16	19	35	19	62	54	59	22	27	22	27	15
19	15	20	32	18	64	48	45	22	26	22	18	15
20	16	22	30	17	53	246	38	30	25	22	17	15
21	16	21	27	17	43	164	34	32	24	21	17	15
22	20	19	25	18	39	96	132	80	145	21	16	15
23	20	23	23	19	36	83	147	370	72	20	16	15
24	19	26	20	20	33	103	75	107	51	24	15	15
25	18	22	19	20	31	113	57	89	39	22	15	15
26	17	20	19	20	29	114	47	220	35	22	15	15
27	17	23	20	19	28	83	41	87	32	22	15	15
28	17	83	21	20	24	77	36	182	30	21	15	15
29	16	43	21	20	60	58	34	184	28	20	15	15
30	16	31	20	21	---	47	37	85	27	20	15	15
31	16	---	20	21	---	41	---	63	---	20	14	---
TOTAL	512	664	1187	619	1670	1950	1393	2049	1239	794	569	462
MEAN	16.5	22.1	38.3	20.0	57.6	62.9	46.4	66.1	41.3	25.6	18.4	15.4
MAX	20	83	180	22	352	246	147	370	145	90	32	19
MIN	15	16	19	17	20	20	26	22	24	20	14	15
CFSM	.52	.70	1.21	.63	1.82	1.98	1.46	2.09	1.30	.81	.58	.49
IN.	.60	.78	1.39	.73	1.96	2.29	1.63	2.40	1.45	.93	.67	.54

CAL YR 1983 TOTAL 14311 MEAN 39.2 MAX 601 MIN 15 CFSM 1.24 IN 16.79
WTR YR 1984 TOTAL 13108 MEAN 35.8 MAX 370 MIN 14 CFSM 1.13 IN 15.38

05518000 KANKAKEE RIVER AT SHELBY, IN

LOCATION.--Lat 41°10'58", long 87°20'33", in SW¼NE¼ sec.33, T.32 N., R.8 W., Lake County, Hydrologic Unit 07120001, on right bank 25 ft upstream from Monon Railroad bridge, 1 mile south of Shelby, 7.7 miles upstream from Beaver Lake ditch, and at mile 67.9.

DRAINAGE AREA.--1,779 mi^2, of which 201 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1922 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1005: 1928(M). WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 628.13 ft National Geodetic Vertical Datum of 1929. Prior to Dec. 19, 1934, nonrecording gage at highway bridge about 400 ft upstream. Dec. 19, 1934, to Oct. 4, 1965, water-stage recorder on left bank 50 ft downstream, and Oct. 5, 1965, to Sept. 21, 1966, nonrecording gage on right bank 200 ft upstream. All at same datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--62 years, 1,621 ft^3/s, 12.37 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 7,650 ft^3/s Mar. 26, 1982; maximum gage height, 12.98 ft Mar. 24, 1982; minimum daily discharge, 260 ft^3/s Jan. 13-15, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,290 ft^3/s Mar. 27; gage height, 10.33 ft; minimum daily, 562 ft^3/s Aug. 31, Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	786	727	1530	1390	1040	2210	3760	2930	3930	1970	961	562
2	800	735	1510	1360	1060	2140	3590	2740	3740	1810	928	595
3	798	733	1490	1320	1070	2090	3440	2590	3500	1690	907	623
4	785	730	1460	1290	1060	2070	3350	2500	3220	1620	912	648
5	772	729	1450	1260	1050	2040	3300	2440	2980	1580	910	632
6	752	732	1500	1240	1040	1990	3230	2360	2710	1540	907	634
7	764	737	1590	1220	1040	1940	3150	2280	2520	1490	893	665
8	752	738	1690	1200	1050	1910	3030	2210	2370	1440	866	679
9	749	769	1800	1180	1070	1870	2930	2140	2300	1380	852	631
10	734	794	1810	1160	1130	1810	2850	2060	2230	1320	845	628
11	739	780	1820	1140	1220	1760	2740	2000	2090	1350	841	768
12	771	778	2190	1110	1580	1730	2630	1950	1990	1400	826	777
13	769	775	2480	1060	2840	1690	2600	1900	1920	1380	807	717
14	772	767	2660	1020	3380	1670	2560	1870	1940	1350	803	696
15	800	781	2870	980	3590	1680	2510	1850	1970	1310	781	704
16	774	835	2950	930	3690	2140	2490	1790	1990	1260	732	716
17	731	852	2920	900	3780	2600	2560	1730	2000	1230	714	721
18	706	839	2790	875	3860	2790	2660	1660	1960	1200	717	679
19	696	865	2400	840	3940	3000	2750	1640	1900	1160	717	684
20	661	866	2180	810	3990	3400	2800	1740	1850	1110	721	682
21	675	864	2020	785	3940	3900	2810	1980	1780	1090	695	673
22	733	878	1920	765	3800	4100	2820	2200	1770	1070	687	654
23	782	890	1830	755	3610	4140	3110	2760	2250	1050	671	653
24	824	942	1770	770	3410	4130	3350	3070	2460	1020	654	614
25	843	983	1720	790	3220	4170	3450	3000	2630	1020	633	618
26	819	1030	1680	825	3020	4240	3530	3250	2730	1030	611	646
27	800	1070	1640	870	2870	4280	3520	3550	2790	1050	601	652
28	793	1190	1590	915	2720	4240	3430	3720	2740	1050	599	696
29	774	1370	1530	950	2400	4150	3290	4050	2470	1030	592	684
30	743	1490	1470	995	---	4020	3120	4150	2200	1020	577	674
31	731	---	1440	1020	---	3900	---	4060	---	988	562	---
TOTAL	23628	26269	59700	31725	71470	87800	91360	78170	72930	40008	23522	20005
MEAN	762	876	1926	1023	2464	2832	3045	2522	2431	1291	759	667
MAX	843	1490	2950	1390	3990	4280	3760	4150	3930	1970	961	777
MIN	661	727	1440	755	1040	1670	2490	1640	1770	988	562	562
CFSM	.43	.49	1.08	.58	1.39	1.59	1.71	1.42	1.37	.73	.43	.38
IN.	.49	.55	1.25	.66	1.49	1.84	1.91	1.63	1.53	.84	.49	.42

CAL YR 1983 TOTAL 718357 MEAN 1968 MAX 5110 MIN 639 CFSM 1.11 IN 15.02
WTR YR 1984 TOTAL 626587 MEAN 1712 MAX 4280 MIN 562 CFSM .96 IN 13.10

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05519000 SINGLETON DITCH AT SCHNEIDER, IN

LOCATION.--Lat 41°12'44", long 87°26'44", in SW¼NW¼ sec.22, T.32 N., R.9 W., Lake County, Hydrologic Unit 07120001, on left bank 15 ft upstream from bridge on Ackerman Avenue, 0.5 mile upstream from Bruce ditch, 1.5 miles downstream from Cedar Creek, 1.6 miles north of Schneider, and at mile 10.1.

DRAINAGE AREA.--123 mi².

PERIOD OF RECORD.--July 1948 to current year.

REVISED RECORDS.--WSP 1915: 1956-59. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 623.67 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1949, nonrecording gage at same site at datum 2.00 ft higher. Oct. 1, 1949, to Aug. 13, 1951, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--36 years, 109 ft³/s, 12.03 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,550 ft³/s Mar. 5, 1976; maximum gage height, 12.37 ft June 25, 1975; minimum daily discharge, .6 ft³/s Sept. 7,8,10, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 730 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 13	1200	1210	8.10	May 26	1100	797	6.30
Mar. 20	2100	1150	7.87	May 29	0200	846	6.53
May 23	0400	*1350	*8.69				

Minimum daily discharge, 11 ft³/s Aug. 24, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	31	154	60	55	94	238	146	284	53	22	13
2	27	31	133	63	55	105	197	130	217	52	21	15
3	27	32	122	66	66	110	189	124	184	48	19	16
4	28	32	102	68	67	118	257	133	163	49	21	16
5	27	32	94	69	65	113	249	130	159	45	19	15
6	27	32	162	69	72	104	220	120	148	48	18	15
7	26	31	194	68	84	99	194	115	123	49	16	16
8	26	31	150	66	76	91	173	111	111	44	19	16
9	26	31	131	65	71	87	154	107	174	48	22	20
10	27	33	120	64	63	85	144	100	183	41	26	21
11	27	37	193	63	82	84	141	97	147	76	31	21
12	35	42	637	62	355	81	143	92	126	89	23	20
13	42	42	441	61	1120	82	194	90	119	62	19	20
14	35	42	391	59	793	80	197	88	137	53	17	21
15	34	41	473	58	548	88	193	82	113	50	15	21
16	56	39	322	57	421	517	276	76	105	44	13	21
17	59	39	250	56	360	395	326	72	106	39	13	20
18	59	39	210	55	325	310	301	71	98	37	16	20
19	59	40	150	52	341	277	266	70	90	34	14	20
20	63	44	110	49	295	882	233	104	85	30	14	20
21	59	49	82	48	228	933	208	138	81	30	12	19
22	56	42	74	47	205	688	406	290	83	26	13	19
23	49	48	69	50	189	568	591	1240	93	27	12	20
24	43	77	64	52	181	606	406	773	85	24	11	22
25	40	63	60	54	167	565	313	477	75	25	11	21
26	38	55	59	56	142	570	254	722	69	29	12	21
27	36	56	57	57	130	463	216	492	67	36	13	21
28	35	258	57	58	103	439	203	519	59	32	15	21
29	32	253	56	59	118	361	160	754	56	24	15	22
30	32	187	56	58	---	303	176	501	53	22	14	21
31	31	---	58	56	---	265	---	363	---	24	13	---
TOTAL	1188	1809	5231	1825	6777	9563	7218	8327	3593	1292	519	574
MEAN	38.3	60.3	169	58.9	234	308	241	269	120	41.7	16.7	19.1
MAX	63	258	637	69	1120	933	591	1240	284	89	31	22
MIN	26	31	56	47	55	80	141	70	53	22	11	13
CFSM	.31	.49	1.37	.48	1.90	2.50	1.96	2.19	.98	.34	.14	.16
IN.	.36	.55	1.58	.55	2.05	2.89	2.18	2.52	1.09	.39	.16	.17

CAL YR 1983 TOTAL 46861 MEAN 128 MAX 1830 MIN 23 CFSM 1.04 IN 14.17
WTR YR 1984 TOTAL 47916 MEAN 131 MAX 1240 MIN 11 CFSM 1.07 IN 14.49

05520500 KANKAKEE RIVER AT MOMENCE, IL

LOCATION.--Lat 41°09'36", long 87°40'07", in SW¼NE¼ sec.24, T.31 N., R.13 E., Kankakee County, Hydrologic Unit 07120001, on right bank at Hill Street in Momence, 0.2 mi downstream from bridge on State Highways 1 and 17, and 1.2 mi upstream from Tower Creek, and at mile 47.9.

DRAINAGE AREA.--2,294 mi².

PERIOD OF RECORD.--February to December 1905, February to July 1906, December 1914 to current year.

REVISED RECORDS.--WSP 1238: 1916, 1930. WSP 1308: 1915(M), 1917(M), 1919(M), 1922(M), 1926(M), 1934-35(M), 1938(M). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 609.18 ft National Geodetic Vertical Datum of 1929. Prior to Aug. 1, 1938, nonrecording gage at site 0.2 mi upstream at datum 1.00 ft higher. Aug. 1, 1938, to Aug. 8, 1969, water-stage recorder at present site at datum 1.00 ft higher.

REMARKS.--Water-discharge records good except those for winter periods and those for period of no gage-height record, July 5 to Aug. 6, which are poor.

AVERAGE DISCHARGE.--69 years (water years 1916-84), 1,973 ft³/s, 11.68 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft³/s Mar. 6, 1979, gage height, 10.51 ft, ice jam; minimum observed, 306 ft³/s Sept. 1, 6, 17, 1919.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,200 ft³/s Feb. 13, gage height, 7.96 ft (backwater from ice); minimum, 512 ft³/s Sept. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	747	767	1850	1800	1400	2500	5230	3890	5240	2340	1100	517
2	757	757	1790	1700	1400	2400	5010	3710	4950	2170	1100	535
3	767	757	1730	1650	1400	2500	4840	3540	4610	1920	900	553
4	778	757	1680	1650	1400	2600	5080	3450	4270	1710	900	589
5	747	757	1620	1600	1450	2700	4700	3360	3950	1650	900	591
6	727	757	1730	1550	1500	2700	4480	3240	3500	1500	900	583
7	727	761	1930	1500	1600	2700	4240	3210	3350	1500	921	582
8	727	767	1990	1500	1650	2620	4030	3120	3220	1450	882	630
9	717	779	2070	1500	1750	2560	3820	3070	3220	1500	860	629
10	717	856	2230	1500	2000	2490	3620	2990	3200	1550	878	592
11	687	859	2460	1450	2500	2410	3470	2910	3180	1700	882	612
12	767	834	3590	1450	3000	2300	3380	2810	3030	1650	864	734
13	767	825	3560	1300	7000	2300	3390	2780	2970	1550	832	746
14	737	817	3640	1250	6000	2280	3440	2730	2640	1500	808	708
15	737	810	4010	1200	4200	2350	3380	2690	2470	1450	802	697
16	788	854	3830	1150	3800	3760	3550	2660	2370	1400	754	697
17	798	909	3640	1100	3600	3930	3760	2620	2350	1300	709	705
18	767	903	3420	1100	3600	3960	3690	2550	2320	1250	699	662
19	757	935	2890	1050	3700	4150	3660	2480	2200	1200	697	663
20	747	972	2520	1050	3700	6020	3620	2630	2040	1150	702	670
21	780	952	2400	1000	3600	6730	3580	2890	1910	1150	665	666
22	810	951	2300	1000	3500	6610	4000	3250	1720	1100	660	653
23	860	992	2250	1000	3400	6480	4740	5530	1700	1000	651	652
24	900	1050	2200	1000	3300	6630	4530	5330	2040	1000	629	645
25	940	1060	2150	1050	3000	6540	4450	5070	2430	1000	604	609
26	960	1050	2100	1100	2900	6620	4390	5430	2700	1000	553	619
27	930	1110	2000	1150	2700	6330	4340	5200	2960	1100	565	629
28	880	1590	1950	1250	2600	6240	4270	5400	3100	1200	566	649
29	850	1830	1900	1350	2500	5980	4190	6260	3130	1200	565	676
30	810	1840	1850	1500	---	5700	4050	5850	2940	1200	550	665
31	778	---	1800	1400	---	5450	---	5460	---	1100	527	---
TOTAL	24461	28858	75080	40850	84150	128540	122930	116110	89710	43490	23625	19158
MEAN	789	962	2422	1318	2902	4146	4098	3745	2990	1403	762	639
MAX	960	1840	4010	1800	7000	6730	5230	6260	5240	2340	1100	746
MIN	687	757	1620	1000	1400	2280	3380	2480	1700	1000	527	517
CFSM	.34	.42	1.06	.57	1.27	1.81	1.79	1.63	1.30	.61	.33	.28
IN.	.40	.47	1.22	.66	1.36	2.08	1.99	1.88	1.45	.71	.38	.31

CAL YR 1983 TOTAL 896030 MEAN 2455 MAX 9420 MIN 620 CFSM 1.07 IN. 14.53
WTR YR 1984 TOTAL 796962 MEAN 2177 MAX 7000 MIN 517 CFSM .95 IN. 12.92

05521000 IROQUOIS RIVER AT ROSEBUD, IN

LOCATION.--Lat 41°02'00", long 87°10'49", in NW¼SW¼ sec.24, T.30 N., R.7 W., Jasper County, Hydrologic Unit 07120002, on right bank 100 ft downstream from bridge on county road, 0.5 mile north of Rosebud, 0.5 mile downstream from confluence of Swain and Dexter ditches, 1.5 miles upstream from Davidson ditch, 2 miles east of Parr, and at mile 93.5.

DRAINAGE AREA.--35.6 mi².

PERIOD OF RECORD.--July 1948 to current year.

REVISED RECORDS.--WSP 1338: 1950-53. WSP 1728: 1959-60(M). WSP 1915: 1949-60. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 661.47 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 1, 1953, nonrecording gage on downstream side of county road bridge at same datum.

REMARKS.--Records good, except those for winter period, which are fair.

AVERAGE DISCHARGE.--36 years, 27.1 ft³/s, 10.34 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 475 ft³/s May 2, 1983; maximum gage height, 8.86 ft Feb. 10, 1959; minimum daily discharge, 0.5 ft³/s Oct. 11, 12, 19, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 150 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 11	2300	170	3.47	Mar. 20	0800	268	4.56
Feb. 13	0500	*288	*4.77	Mar. 25	1900	181	3.60
Mar. 16	0600	228	4.14	May 26	0400	201	3.83

Minimum daily discharge, 2.6 ft³/s Aug. 31.

NOTE--No gage-height record Dec. 12 to Jan. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	5.3	17	15	14	25	50	32	48	12	3.7	2.9
2	3.5	5.8	15	16	17	30	47	31	43	11	3.7	2.9
3	3.5	6.0	14	16	21	31	49	32	39	9.8	8.4	2.7
4	3.5	5.5	16	17	28	32	59	44	36	9.5	6.3	3.1
5	3.4	5.3	23	17	33	30	61	41	33	9.8	4.6	4.2
6	3.5	5.3	55	17	34	27	51	38	31	10	4.2	4.6
7	3.7	5.3	41	17	30	26	44	36	29	9.2	4.4	4.6
8	3.4	5.1	32	17	26	25	41	33	28	8.4	7.2	3.9
9	3.5	5.3	29	16	24	25	39	31	52	8.1	4.6	4.6
10	3.7	6.3	28	16	26	26	36	29	35	6.9	4.0	6.3
11	3.9	7.4	93	15	65	24	34	29	29	6.9	3.9	4.8
12	4.2	6.9	150	15	193	22	37	27	26	6.6	3.7	4.0
13	4.2	6.3	82	15	257	22	46	29	26	6.3	3.5	3.9
14	4.1	6.0	68	14	170	21	40	27	27	6.0	3.4	4.0
15	3.9	6.3	88	14	127	41	40	26	25	5.8	3.1	3.7
16	3.8	6.9	49	14	100	189	46	25	24	5.1	3.1	3.7
17	3.6	6.6	37	14	86	119	50	25	23	4.6	3.1	3.5
18	3.5	6.3	30	14	75	82	49	25	21	4.6	3.4	3.5
19	3.3	6.9	23	13	73	84	44	25	19	4.8	3.2	3.5
20	3.4	8.1	19	12	62	229	39	74	18	5.3	3.2	3.4
21	4.7	8.1	18	12	55	162	37	78	17	8.1	3.2	3.2
22	38	7.2	17	12	50	141	87	68	17	5.3	3.9	3.2
23	15	9.0	17	12	46	116	97	96	17	4.8	3.2	3.4
24	9.5	10	16	13	42	103	75	63	17	4.6	3.2	3.4
25	7.8	10	16	13	37	132	60	72	16	4.8	3.2	3.2
26	6.9	10	15	14	34	130	53	163	14	6.0	3.2	3.4
27	6.0	17	15	15	30	103	47	100	15	5.8	3.2	3.4
28	6.0	51	15	15	23	94	40	87	13	4.8	3.4	3.4
29	5.8	29	14	15	26	75	39	93	12	4.4	3.1	3.4
30	5.8	20	14	14	---	63	38	69	12	4.0	2.7	3.4
31	5.8	---	15	14	---	55	---	55	---	3.7	2.6	---
TOTAL	184.4	294.2	1081	453	1604	2284	1475	1603	762	207.0	119.6	111.2
MEAN	5.95	9.81	34.9	14.6	62.2	73.7	49.2	51.7	25.4	6.68	3.86	3.71
MAX	38	51	150	17	257	229	97	163	52	12	8.4	6.3
MIN	3.3	5.1	14	12	14	21	34	25	12	3.7	2.6	2.7
CFSM	.17	.28	.98	.41	1.75	2.07	1.38	1.45	.71	.19	.11	.10
IN.	.19	.31	1.13	.47	1.89	2.39	1.54	1.67	.80	.22	.12	.12

CAL YR 1983 TOTAL 10814.9 MEAN 29.6 MAX 367 MIN 2.7 CFSM .83 IN 11.30
WTR YR 1984 TOTAL 10378.4 MEAN 28.4 MAX 257 MIN 2.6 CFSM .80 IN 10.84

05522000 IROQUOIS RIVER NEAR NORTH MARION, IN

LOCATION.--Lat 40°58'12", long 87°06'50", in NE¼NW¼ sec.16, T.29 N., R.6 W., Jasper County, Hydrologic Unit 07120002, on downstream side of county highway bridge, 1.2 miles upstream from Ryan ditch, 2 miles east of North Marion, 3.5 miles northeast of Rensselaer, and at mile 87.7.

DRAINAGE AREA.--144 mi².

PERIOD OF RECORD.--December 1948 to current year.

REVISED RECORDS.--WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 646.68 ft National Geodetic Vertical Datum of 1929. Prior to Sept. 6, 1955, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter period, which are fair. Water from Oliver ditch, an upstream tributary, can be diverted to Ryan ditch and thus enter the Iroquois River below station. Streamflow affected by irrigation.

AVERAGE DISCHARGE.--35 years (water years 1950 to current year), 133 ft³/s, 12.54 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,040 ft³/s June 10, 1958, gage height, 15.09 ft; minimum daily, 1.6 ft³/s Sept. 15, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,230 ft³/s Feb. 14, gage height, 11.12 ft; minimum daily, 6.4 ft³/s Sept. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	31	114	68	66	133	249	160	268	49	20	7.9
2	12	31	97	71	74	139	222	141	217	46	18	7.5
3	12	31	90	73	90	145	213	135	188	39	18	8.0
4	12	31	86	75	117	153	241	181	170	42	20	7.6
5	12	28	102	77	142	152	270	221	154	40	18	6.4
6	12	27	206	77	154	141	257	194	143	39	17	9.0
7	12	26	266	76	153	131	219	172	133	40	14	9.5
8	12	26	230	75	150	111	192	155	125	36	17	7.9
9	11	26	185	74	140	115	179	140	156	36	16	8.7
10	11	27	165	73	128	120	172	129	156	32	13	15
11	11	30	217	71	268	118	159	123	128	31	12	26
12	12	30	527	69	586	108	155	128	114	30	11	19
13	13	29	617	68	1080	99	186	117	106	27	10	15
14	12	28	531	67	1230	95	185	116	135	25	9.4	16
15	12	28	521	66	1160	123	171	106	128	27	9.8	14
16	12	34	429	66	974	456	187	99	111	26	11	13
17	12	38	299	66	779	696	218	97	104	22	10	12
18	12	37	200	63	614	611	216	98	96	21	9.9	11
19	12	39	147	59	497	469	204	90	82	21	8.8	11
20	12	43	116	55	413	626	193	182	78	21	7.6	12
21	16	43	98	54	343	914	168	338	72	26	6.5	11
22	107	41	87	55	290	919	241	326	71	23	9.4	9.9
23	150	43	79	57	250	818	456	353	79	22	12	11
24	91	53	74	60	226	696	458	350	79	20	12	13
25	71	49	71	63	202	618	367	298	71	21	12	13
26	55	45	68	65	176	754	289	708	59	25	11	12
27	44	50	67	66	165	725	242	815	65	33	9.3	12
28	40	189	66	66	105	601	209	666	59	29	9.3	13
29	36	215	64	66	100	478	177	560	52	22	9.0	12
30	32	159	64	65	---	360	176	475	49	22	9.0	12
31	31	---	66	64	---	291	---	336	---	20	8.4	---
TOTAL	911	1507	5951	2070	10672	11915	6871	8029	3446	913	378.4	355.4
MEAN	29.4	50.2	192	66.8	368	384	229	259	115	29.5	12.2	11.8
MAX	150	215	617	77	1230	919	458	815	268	49	20	26
MIN	11	26	64	54	66	95	155	90	49	20	6.5	6.4
CFSM	.20	.35	1.33	.46	2.56	2.67	1.59	1.80	.80	.21	.09	.08
IN.	.24	.39	1.54	.53	2.76	3.08	1.77	2.07	.89	.24	.10	.09

CAL YR 1983 TOTAL 53152.3 MEAN 146 MAX 1270 MIN 3.6 CFSM 1.01 IN 13.73
WTR YR 1984 TOTAL 53018.8 MEAN 145 MAX 1230 MIN 6.4 CFSM 1.01 IN 13.70

BEST COPY AVAILABLE

05522500 IROQUOIS RIVER AT RENSSELAER, IN

LOCATION.--Lat 40°56'00", long 87°07'44", in NW¼SE¼ sec.29, T.29 N., R.6 W., Jasper County, Hydrologic Unit 07120002, on right bank 20 ft downstream from bridge on State Highway 114, 0.8 mile east of Rensselaer, 1.5 miles downstream from Ryan ditch, 5.5 miles upstream from Slough Creek, and at mile 84.9.

DRAINAGE AREA.--203 mi².

PERIOD OF RECORD.--July 1948 to current year.

REVISED RECORDS.--WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 642.29 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to July 8, 1949, nonrecording gage at same site and datum.

REMARKS.--Records good. Streamflow affected by irrigation.

AVERAGE DISCHARGE.--36 years, 169 ft³/s, 11.31 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,550 ft³/s June 10, 1958, gage height, 16.54 ft; minimum daily, 2.2 ft³/s Sept. 9, 15, 16, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,470 ft³/s Feb. 14, gage height, 12.69 ft; minimum daily, 9.2 ft³/s Sept. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	35	141	83	79	150	302	199	354	55	21	10
2	15	36	118	86	91	175	273	180	287	52	19	9.8
3	14	36	108	90	111	186	268	176	249	45	19	10
4	14	36	106	92	138	201	314	241	223	47	22	10
5	15	33	121	93	172	201	345	285	202	46	19	9.2
6	15	33	275	94	186	183	317	250	185	45	17	11
7	15	33	337	92	192	164	265	226	171	45	15	11
8	15	32	282	90	180	143	234	201	158	41	18	10
9	15	31	227	88	172	150	219	182	190	41	16	11
10	15	33	200	86	154	158	209	166	190	37	15	15
11	15	36	302	84	275	141	193	159	154	38	14	23
12	18	36	700	82	667	132	191	161	139	36	14	17
13	18	35	747	80	1300	126	231	149	129	32	14	14
14	17	34	660	79	1460	115	228	146	160	29	12	15
15	15	34	646	78	1350	147	215	132	151	33	12	14
16	15	41	519	77	1130	651	240	124	133	31	13	14
17	15	45	367	77	914	860	286	122	127	27	13	12
18	15	45	232	74	742	724	281	122	115	25	13	12
19	15	47	176	69	615	569	262	115	98	26	12	12
20	16	51	139	66	509	868	244	282	93	27	11	12
21	20	54	123	64	427	1110	213	481	87	29	10	11
22	127	51	108	65	363	1080	354	439	86	23	12	11
23	178	54	97	67	315	953	607	481	96	23	13	12
24	110	65	90	69	288	824	573	455	97	21	13	13
25	86	63	86	72	254	798	456	443	86	23	12	14
26	68	59	83	76	220	966	364	1040	71	27	12	13
27	54	64	82	79	174	872	305	1030	77	35	11	13
28	49	238	81	81	128	722	263	843	69	30	11	13
29	42	270	78	80	121	571	225	731	61	24	11	13
30	38	198	77	75	---	432	223	610	56	24	11	13
31	36	---	80	76	---	351	---	462	---	22	10	---
TOTAL	1115	1858	7388	2467	12727	14724	8700	10633	4294	1039	435	378.0
MEAN	36.0	61.9	238	79.6	439	475	290	343	143	33.5	14.0	12.6
MAX	178	270	747	94	1460	1110	607	1040	354	55	22	23
MIN	14	31	77	64	79	116	191	115	56	21	10	9.2
CFSM	.18	.31	1.17	.39	2.16	2.34	1.43	1.69	.70	.17	.07	.06
IN.	.20	.34	1.35	.45	2.33	2.70	1.59	1.95	.79	.19	.08	.07

CAL YR 1983 TOTAL 66781.0 MEAN 183 MAX 1500 MIN 14 CFSM .90 IN 12.24
WTR YR 1984 TOTAL 65758.0 MEAN 180 MAX 1460 MIN 9.2 CFSM .89 IN 12.05

05523000 BICE DITCH NEAR SOUTH MARION, IN

LOCATION.--Lat 40°52'00", long 87°05'32", in NE¼NW¼ sec.22, T.28 N., R.6 W., Jasper County, Hydrologic Unit 07120002, on left bank at upstream side of bridge on State Highway 16, 2.3 miles upstream from mouth, 3 miles southeast of South Marion, and 5 miles southeast of Rensselaer.

DRAINAGE AREA.--21.8 mi².

PERIOD OF RECORD.--December 1948 to current year.

REVISED RECORDS.--WSP 1508: 1956. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 651.30 ft National Geodetic Vertical Datum of 1929. Prior to Aug. 5, 1955, nonrecording gage, and Aug. 5, 1955, to Sept. 30, 1965, water-stage recorder at present site at datum 2.00 ft higher.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--35 years (water years 1950 to current year), 17.4 ft³/s, 10.84 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,080 ft³/s Mar. 4, 1979; maximum gage height, 14.02 ft June 13, 1958, at present datum; no flow at times during 1952, 1955, and 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 340 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 13	0900	406	6.92	Mar. 25	1900	448	7.28
Mar. 16	0600	364	6.55	May 26	0300	*898	*10.48
Mar. 20	0900	382	6.71				

Minimum daily discharge, 0.25 ft³/s Sept. 15, 19-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	.68	2.8	3.2	2.6	8.2	24	10	32	2.3	1.7	.31
2	.31	.74	2.6	3.4	2.6	9.4	20	9.6	22	2.2	1.5	.31
3	.31	.86	2.3	3.7	5.0	9.7	22	9.9	16	2.1	1.4	.35
4	.31	.86	7.3	4.0	6.0	9.9	38	24	13	2.2	1.3	.35
5	.31	.80	14	4.2	7.6	9.7	56	30	11	2.2	1.2	.39
6	.31	.74	36	4.4	7.4	9.0	33	25	9.1	2.3	1.2	.35
7	.31	.68	23	4.2	6.6	8.3	22	20	8.0	2.6	1.0	.31
8	.31	.68	13	4.0	6.0	7.5	18	15	7.3	2.0	1.0	.28
9	.28	.62	11	4.0	5.4	7.3	16	12	6.3	1.9	1.0	.31
10	.28	.86	10	3.8	11	6.8	13	9.6	5.7	1.9	.93	.35
11	.28	1.8	70	3.5	68	6.6	12	9.6	4.9	2.2	.80	.31
12	.39	1.7	150	3.4	247	5.1	12	9.3	4.9	2.6	.68	.28
13	.52	1.2	73	3.2	349	5.1	20	9.3	4.9	2.0	.68	.31
14	.52	1.0	80	3.1	164	5.3	17	8.0	4.9	1.8	.62	.28
15	.48	1.1	73	3.1	100	22	18	7.0	4.7	1.7	.57	.25
16	.43	1.6	32	3.0	78	262	28	6.6	4.5	1.6	.52	.28
17	.43	1.7	20	2.9	77	123	42	6.4	4.2	1.5	.57	.28
18	.43	1.4	15	2.8	65	76	38	6.1	3.8	1.4	.68	.28
19	.43	1.3	29	2.7	66	68	27	6.1	3.5	1.3	.74	.25
20	.52	1.4	14	2.5	48	274	22	122	3.5	1.4	.68	.25
21	.62	1.7	11	2.5	40	147	18	136	3.5	1.7	.57	.25
22	14	1.5	8.3	2.4	33	112	80	89	3.4	1.4	.52	.25
23	5.5	1.4	6.3	2.5	26	97	78	77	3.4	1.2	.52	.25
24	1.8	1.5	4.2	2.5	21	86	52	46	3.4	1.3	.52	.28
25	1.3	1.4	2.6	2.6	16	238	40	130	3.0	2.1	.43	.39
26	1.0	1.2	2.3	2.6	14	192	30	647	2.8	2.1	.43	.48
27	.86	1.8	2.6	2.7	11	97	22	215	2.6	5.9	.43	.48
28	.80	25	2.7	2.9	5.5	77	16	132	2.6	5.1	.43	.48
29	.74	8.0	2.8	2.9	9.3	52	14	116	2.3	3.1	.48	.43
30	.68	4.0	2.9	2.8	---	37	16	72	2.3	2.1	.43	.43
31	.68	---	3.0	2.7	---	30	---	46	---	1.8	.35	---
TOTAL	35.45	69.22	726.7	98.2	1498.0	2097.9	864	2061.5	203.5	67.0	23.88	9.80
MEAN	1.14	2.31	23.4	3.17	51.7	67.7	28.8	66.5	6.78	2.16	.77	.33
MAX	14	25	150	4.4	349	274	80	647	32	5.9	1.7	.48
MIN	.28	.62	2.3	2.4	2.6	5.1	12	6.1	2.3	1.2	.35	.25
CFSM	.05	.11	1.07	.15	2.37	3.11	1.32	3.05	.31	.10	.04	.02
IN.	.06	.12	1.24	.17	2.56	3.58	1.47	3.52	.35	.11	.04	.02

CAL YR 1983 TOTAL 6412.72 MEAN 17.6 MAX 617 MIN .18 CFSM .81 IN 10.94
WTR YR 1984 TOTAL 7755.15 MEAN 21.2 MAX 647 MIN .25 CFSM .97 IN 13.23

05524500 IROQUOIS RIVER NEAR FORESMAN, IN

LOCATION.--Lat 40°52'14", long 87°18'24", in NE¼SE¼ sec.15, T.28 N., R.8 W., Newton County, Hydrologic Unit 07120002, on right bank at downstream side of bridge on State Highway 55, 0.2 mile north of intersection of State Highways 16 and 55, 0.5 mile downstream from Mosquito Creek, 0.6 mile west of Foresman, 3 miles east of Brook, and at mile 72.7.

DRAINAGE AREA.--449 mi^2.

PERIOD OF RECORD.--December 1948 to current year.

REVISED RECORDS.--WSP 1338: 1953. WSP 1438: 1955. WSP 1508: 1956. WSP 2115 : Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 624.00 ft National Geodetic Vertical Datum of 1929. Prior to Sept. 7, 1955, nonrecording gage 2.5 miles upstream at datum 3.54 ft higher.

REMARKS.--Records good.

AVERAGE DISCHARGE.--35 years (water years 1950 to current year), 384 ft^3/s, 11.61 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,930 ft^3/s June 14, 1958, gage height, 24.42 ft; minimum daily, 6.3 ft^3/s Sept. 10, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,210 ft^3/s Feb. 14, gage height, 18.84 ft; minimum daily, 14 ft^3/s Sept. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	56	289	161	144	282	1180	422	1620	100	36	15
2	20	56	223	168	156	297	942	364	1340	98	36	14
3	20	58	197	173	192	312	758	343	1060	90	34	15
4	20	59	202	176	246	324	743	421	789	92	36	16
5	21	56	261	178	317	330	825	560	587	92	41	15
6	22	52	486	180	356	327	848	576	475	102	37	15
7	22	51	681	176	372	315	744	523	416	126	33	16
8	22	49	637	172	365	307	625	453	377	101	30	16
9	23	46	519	166	328	280	549	386	375	85	31	17
10	22	50	432	162	302	295	500	338	386	77	28	20
11	21	59	559	158	452	300	454	307	338	75	26	26
12	24	63	1170	154	1300	265	431	303	295	81	24	28
13	25	62	1430	152	2380	249	493	282	274	66	23	23
14	26	57	1510	150	3110	240	522	273	282	55	23	22
15	24	55	1570	148	3140	292	503	246	287	52	21	22
16	22	61	1510	146	2830	1070	531	224	263	52	21	21
17	21	70	1330	144	2500	1570	634	212	245	47	21	21
18	20	72	1060	138	2210	1660	694	211	229	42	21	19
19	20	74	588	128	1970	1590	676	203	203	39	20	19
20	22	79	436	123	1710	1850	617	444	181	41	20	18
21	27	82	355	121	1490	2260	542	1120	164	45	18	18
22	137	83	308	124	1280	2400	659	1290	154	46	18	17
23	282	81	283	127	1070	2360	1080	1350	162	39	20	17
24	207	92	238	133	877	2250	1220	1310	199	37	20	21
25	136	96	194	138	694	2190	1180	1240	189	38	19	22
26	102	90	176	145	560	2450	1050	2240	152	46	18	24
27	83	91	167	151	486	2450	884	2840	140	71	18	21
28	74	309	161	153	347	2270	699	2820	136	76	18	22
29	68	490	153	152	271	2010	542	2560	117	60	18	22
30	61	407	150	150	---	1700	488	2270	106	46	17	20
31	56	---	155	147	---	1430	---	1950	---	39	16	---
TOTAL	1669	3006	17430	4694	31455	35925	21613	28081	11541	2056	762	582
MEAN	53.8	100	562	151	1085	1159	720	906	385	66.3	24.6	19.4
MAX	282	490	1570	180	3140	2450	1220	2840	1620	126	41	28
MIN	19	46	150	121	144	240	431	203	106	37	16	14
CFSM	.12	.22	1.25	.34	2.42	2.58	1.60	2.02	.86	.15	.06	.04
IN.	.14	.25	1.44	.39	2.61	2.98	1.79	2.33	.96	.17	.06	.05

CAL YR 1983 TOTAL 152771 MEAN 419 MAX 3280 MIN 16 CFSM .93 IN 12.66
WTR YR 1984 TOTAL 158814 MEAN 434 MAX 3140 MIN 14 CFSM .97 IN 13.16

05525000 IRCOUOIS RIVER AT IROQUOIS, IL

LOCATION.--Lat 40°49'25", long 87°34'55", in SE¼ sec.15, T.27 N., R.11 W., Iroquois County, Hydrologic Unit 07120002, on left bank at upstream side of bridge on U.S. Highway 52 in Iroquois, 500 ft upstream from Penn Central bridge, 4.5 mi downstream from Indiana-Illinois State line, and at mile 50.4.

DRAINAGE AREA.--686 mi^2.

PERIOD OF RECORD.--October 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 614.34 ft National Geodetic Vertical Datum of 1929. Prior to Aug. 5, 1945, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--40 years, 553 ft^3/s, 10.95 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft^3/s June 13, 1958, gage height, 26.31 ft; minimum, 5.2 ft^3/s Sept. 13, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,480 ft^3/s Feb. 15, May 28, maximum gage height, 19.86 ft Feb. 15; minimum discharge, 18 ft^3/s Sept. 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	100	1200	360	90	395	2110	701	3010	116	48	19
2	22	110	800	330	90	457	1610	624	2440	108	45	19
3	21	130	600	320	200	488	1260	579	1880	105	43	19
4	20	110	300	300	300	522	1110	604	1370	107	42	18
5	20	90	278	350	600	559	1150	747	987	112	41	19
6	20	60	501	300	550	534	1180	849	729	114	45	19
7	21	70	810	260	550	475	1110	837	584	147	43	19
8	21	65	846	240	520	416	961	759	498	147	39	19
9	21	55	738	230	600	396	850	674	457	119	36	20
10	22	150	604	220	650	425	741	595	455	101	35	20
11	22	600	770	210	700	425	675	540	432	99	33	21
12	23	1000	1680	200	728	412	630	508	381	100	31	24
13	26	600	2070	190	988	369	658	483	342	95	29	32
14	28	400	2300	180	3110	339	709	459	320	82	27	30
15	30	300	2540	170	4470	392	707	434	320	69	26	28
16	30	250	2430	170	4380	1540	716	402	315	61	28	26
17	29	150	2000	160	4120	2270	806	378	293	60	26	25
18	27	170	1800	150	3770	2460	926	364	270	55	25	25
19	27	150	1700	140	3410	2500	960	361	247	50	25	25
20	27	140	1300	140	3000	3320	905	659	219	49	24	23
21	79	230	1100	130	2560	3850	818	1640	195	54	23	24
22	500	200	1000	130	2120	3960	987	1970	182	52	24	23
23	700	500	950	120	1720	3970	1490	2270	186	52	25	23
24	1000	1000	850	120	1360	3830	1690	2280	245	48	22	22
25	600	700	760	110	1060	3820	1730	2170	252	52	23	23
26	500	600	700	110	835	4130	1620	3810	214	51	22	25
27	300	350	600	100	694	4090	1420	4450	178	60	22	27
28	200	600	520	100	551	4000	1180	4470	159	80	22	28
29	140	1000	470	95	394	3740	935	4340	146	83	22	27
30	110	1500	450	92	---	3230	797	4020	128	71	21	29
31	120	---	400	90	---	2660	---	3550	---	56	20	---
TOTAL	4728	11380	33067	5817	44120	59974	32421	46527	17434	2555	937	701
MEAN	153	379	1067	188	1521	1935	1081	1501	581	82.4	30.2	23.4
MAX	1000	1500	2540	360	4470	4130	2110	4470	3010	147	48	32
MIN	20	55	278	90	90	339	630	361	128	48	20	18
CFSM	.22	.55	1.56	.27	2.22	2.82	1.58	2.19	.85	.12	.04	.03
IN.	.26	.62	1.79	.32	2.39	3.25	1.76	2.52	.95	.14	.05	.04

CAL YR 1983 TOTAL 235441 MEAN 645 MAX 4410 MIN 18 CFSM .94 IN. 12.77
WTR YR 1984 TOTAL 259661 MEAN 709 MAX 4470 MIN 18 CFSM 1.03 IN. 14.08

05536190 HART DITCH AT MUNSTER, IN

LOCATION.--Lat 41°33'40", long 87°28'50", in SE¼NW¼ sec.20, T.36 N., R.9 W., Lake County, Hydrologic Unit 07120003, on left bank at city limits of Munster, 0.2 mile downstream from Ridge Road, and 0.4 mile upstream from mouth.

DRAINAGE AREA.--70.7 mi².

PERIOD OF RECORD.--September 1942 to current year.

REVISED RECORDS.--WDR IN-72-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 591.27 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Since Sept. 11, 1959, auxiliary water-stage recorder 1,200 ft upstream from base gage, at same datum.

REMARKS.--Records poor. High flow occasionally in backwater from Little Calumet River.

AVERAGE DISCHARGE.--42 years, 62.0 ft³/s, 11.91 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,670 ft³/s Apr. 28, 1959; maximum gage height, 8.04 ft June 14, 1981; minimum daily discharge, 1.6 ft³/s Dec. 24-26, 31, 1963, Jan. 1, 2, Sept. 4-9, 14-17, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 15	2200	1190	4.71	May 23	1500	*1560	*5.65
Mar. 20	1500	875	4.10	May 28	2200	840	3.70

Minimum daily discharge, 6.0 ft³/s Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	16	68	20	16	35	72	57	122	16	8.0	49
2	12	29	51	20	26	40	66	50	87	15	9.0	9.5
3	14	16	44	21	31	43	118	57	65	14	8.0	8.6
4	12	15	58	22	31	43	205	74	57	14	7.6	9.5
5	11	14	62	24	27	42	153	60	55	13	7.4	9.5
6	9.5	15	132	25	23	39	102	50	46	23	7.2	8.6
7	9.5	15	126	21	20	35	78	46	39	13	15	8.6
8	17	14	78	18	18	33	64	41	35	11	14	12
9	9.5	16	60	17	21	30	62	38	184	10	12	10
10	9.5	30	51	16	39	29	54	36	112	9.8	132	8.6
11	11	27	260	15	74	27	47	33	59	70	42	8.3
12	51	26	518	15	288	26	76	32	44	54	25	9.1
13	20	21	305	14	690	24	150	40	74	31	14	15
14	16	19	302	14	700	25	172	34	216	21	12	9.3
15	11	24	330	14	401	257	221	31	92	17	10	8.2
16	11	46	164	14	252	1030	436	29	82	15	9.0	7.3
17	11	26	85	13	184	665	409	27	75	13	31	6.6
18	11	21	74	13	140	280	291	26	47	12	9.5	6.6
19	11	31	52	13	199	250	202	27	38	10	7.8	6.4
20	58	47	44	13	153	780	143	143	30	9.5	7.8	7.6
21	31	35	38	13	115	700	107	102	69	11	7.8	6.3
22	49	30	35	13	92	500	275	504	104	9.2	7.0	6.0
23	44	132	34	13	78	380	328	1390	50	8.7	7.0	56
24	30	95	31	13	68	400	202	920	37	39	7.0	14
25	23	52	30	13	58	330	135	524	29	21	7.0	41
26	19	37	30	17	51	350	104	420	26	28	6.2	15
27	17	126	29	19	46	257	89	226	28	17	15	12
28	15	365	27	17	33	221	74	515	23	14	14	11
29	15	224	25	17	31	153	68	706	19	11	7.8	8.6
30	15	115	23	17	---	110	76	380	17	9.0	7.0	9.5
31	16	---	21	16	---	88	---	202	---	8.7	6.2	---
TOTAL	601.0	1679	3187	510	3905	7222	4579	6820	1961	587.9	480.3	397.7
MEAN	19.4	56.0	103	16.5	135	233	153	220	65.4	19.0	15.5	13.3
MAX	58	365	518	25	700	1030	436	1390	216	70	132	56
MIN	9.5	14	21	13	16	24	47	26	17	8.7	6.2	6.0
CFSM	.27	.79	1.46	.23	1.91	3.30	2.16	3.11	.93	.27	.22	.19
IN.	.32	.88	1.68	.27	2.05	3.80	2.41	3.59	1.03	.31	.25	.21

CAL YR 1983 TOTAL 28540.2 MEAN 78.2 MAX 976 MIN 8.7 CFSM 1.11 IN 15.02
WTR YR 1984 TOTAL 31929.9 MEAN 87.2 MAX 1390 MIN 6.0 CFSM 1.23 IN 16.80

05536195 LITTLE CALUMET RIVER AT MUNSTER, IN

LOCATION.--Lat 41°34'07", long 87°31'18", in SE¼NW¼ sec.13, T.36 N., R.10 W., Lake County, Hydrologic Unit 07120003, on left bank 200 ft upstream from Hohman Street bridge at north city limits of Munster, 0.4 mile upstream from Indiana-Illinois State line, and 4.6 miles upstream from Thorn Creek.

DRAINAGE AREA.--90.0 mi². During times of floods on Deep River, flow may enter basin from eastern portion of Little Calumet River basin; or, during times of floods on Hart ditch, flow may leave the basin and enter eastern portion of the Little Calumet River basin.

PERIOD OF RECORD.--June 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 580.72 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods which are fair. Flow from eastern portion of Little Calumet River basin is diverted to Lake Michigan by Burns ditch.

AVERAGE DISCHARGE.--26 years, 75.5 ft³/s, 11.39 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,510 ft³/s Apr. 28, 1959, gage height, 13.67 ft; maximum gage height, 16.40 ft June 14, 1981; minimum daily discharge, 1.9 ft³/s Aug. 20, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 762 ft³/s Mar. 16, gage height, 13.01 ft; minimum daily, 8.2 ft³/s Aug. 25 and Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	18	138	28	22	53	122	103	215	20	11	40
2	16	31	113	27	43	57	110	94	168	19	11	17
3	17	37	96	29	58	61	131	92	132	18	10	12
4	16	41	99	32	45	61	168	109	107	17	10	11
5	16	32	94	34	42	59	159	98	99	16	10	12
6	15	18	128	36	35	55	139	87	81	18	10	10
7	14	17	135	32	30	50	120	78	69	16	10	10
8	23	16	115	29	26	46	109	70	60	14	20	9.8
9	17	16	99	26	35	42	103	64	135	13	19	14
10	14	30	88	24	45	37	96	62	116	13	95	11
11	14	43	193	23	72	37	88	59	86	52	43	12
12	55	38	392	22	178	32	107	54	69	45	23	12
13	32	33	318	21	270	32	139	63	63	34	17	18
14	25	29	289	20	420	35	157	55	143	25	15	14
15	20	29	309	20	320	163	181	49	102	20	13	10
16	17	57	246	20	230	701	293	45	88	17	11	9.9
17	16	44	180	20	185	619	329	43	84	15	43	9.6
18	16	38	120	20	170	372	280	41	64	13	15	9.0
19	15	47	91	20	208	306	240	38	52	12	11	8.6
20	46	62	77	20	185	502	197	110	42	12	9.8	9.6
21	72	57	64	20	157	529	163	107	49	12	9.8	8.6
22	70	50	62	20	137	443	219	274	97	11	8.8	8.2
23	70	141	57	20	122	377	273	619	62	11	8.8	43
24	51	115	50	21	111	356	220	549	51	34	8.3	23
25	41	84	43	23	96	327	185	401	39	25	8.2	58
26	34	69	43	25	84	316	158	361	34	23	8.3	28
27	29	129	42	24	78	283	140	297	32	20	8.6	18
28	24	321	39	23	64	252	129	353	29	15	20	15
29	22	245	36	22	58	207	116	475	25	14	9.4	13
30	20	177	33	22	---	172	114	369	23	12	8.8	13
31	19	---	30	22	---	144	---	279	---	11	8.5	---
TOTAL	872	2064	3819	745	3526	6726	4985	5498	2417	597	514.3	487.3
MEAN	28.1	68.8	123	24.0	122	217	166	177	80.6	19.3	16.6	16.2
MAX	72	321	392	36	420	701	329	619	216	52	95	58
MIN	14	16	30	20	22	32	88	38	23	11	8.2	8.2
CFSM	.31	.76	1.37	.27	1.36	2.41	1.84	1.97	.90	.21	.18	.18
IN.	.36	.85	1.58	.31	1.46	2.78	2.06	2.27	1.00	.25	.21	.20

CAL YR 1983 TOTAL 35838.0 MEAN 98.2 MAX 896 MIN 11 CFSM 1.09 IN 14.81
WTR YR 1984 TOTAL 32250.6 MEAN 88.1 MAX 701 MIN 8.2 CFSM .98 IN 13.33

05536195 LITTLE CALUMET RIVER AT MUNSTER, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1983 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)
NOV			
09...	1000	17	23
FEB			
14...	1530	419	316
MAR			
23...	1150	359	69
APR			
12...	1400	121	41
JUN			
21...	1230	36	52
SEP			
13...	0925	16	16

05536275 THORN CREEK AT THORNTON, IL

LOCATION.--Lat 41°34'05", long 87°36'30", near center of N½ sec.34, T.36 N., R.14 E., Cook County, Hydrologic Unit 07120003, on right bank at downstream side of bridge on Margaret Street in Thornton, 1.0 mi downstream from North Creek, and at mile 4.2.

DRAINAGE AREA.--104 mi².

PERIOD OF RECORD.--May 1948 to current year. Prior to October 1974, records published with those for streams in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR IL 1971-74).

REVISED RECORDS.--WSP 1707: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 586.43 ft National Geodetic Vertical Datum of 1929. Prior to Dec. 18, 1948, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good. Some diurnal fluctuation caused by pumping operations above station. Figures of discharge include about 16 ft³/s pumped from ground-water sources for municipal supply and an undetermined amount of ground-water pumpage for industrial use.

AVERAGE DISCHARGE.--36 years, 101 ft³/s, 13.19 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,700 ft³/s July 13, 1957, gage height, 16.00 ft; maximum gage height, 17.06 ft June 14, 1981; minimum daily discharge, 4.4 ft³/s Sept. 11, 1949.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 5, 1947, reached a stage of 14.34 ft, (from floodmark), discharge, 4,200 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 13	1615	1040	9.62	May 23	0830	1160	10.30
Mar. 16	1115	*2060	*13.52	May 29	0230	965	9.16
Mar. 20	1845	942	9.01				

Minimum daily discharge, 21 ft³/s Jan. 13, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	28	115	28	25	54	85	116	127	34	25	78
2	25	28	75	28	32	60	79	73	104	29	23	48
3	29	31	68	31	62	66	165	74	92	30	37	39
4	28	27	94	35	52	63	291	108	82	34	31	33
5	29	33	86	36	43	64	196	79	75	31	28	34
6	29	32	165	36	39	58	125	77	89	31	26	31
7	29	26	152	30	32	51	96	58	80	34	25	31
8	40	25	109	28	29	46	82	53	62	31	31	30
9	32	24	109	28	29	43	85	49	247	29	45	37
10	30	47	93	25	46	42	96	50	132	28	379	30
11	37	62	346	23	130	40	59	54	72	106	137	26
12	93	50	787	22	443	38	108	90	58	49	56	29
13	48	43	412	21	962	35	188	67	94	44	37	47
14	33	31	372	23	762	42	150	54	203	34	34	50
15	29	29	436	23	358	172	183	45	104	33	38	41
16	26	53	210	22	232	1710	395	37	106	29	29	34
17	28	62	113	22	184	941	445	37	83	28	32	32
18	25	35	86	21	179	403	291	38	56	28	41	28
19	22	48	74	25	240	315	189	35	43	28	33	27
20	60	86	64	22	181	858	154	195	38	29	27	27
21	129	67	62	22	138	804	109	152	45	36	25	26
22	176	49	62	25	113	534	361	333	175	31	28	25
23	154	319	53	25	100	391	461	1050	103	29	28	59
24	83	200	43	32	86	413	241	529	86	76	25	40
25	50	96	41	32	74	339	148	297	55	54	26	114
26	37	70	41	30	65	308	118	391	45	64	28	74
27	33	174	41	36	60	245	118	228	44	57	32	42
28	29	640	37	28	46	217	154	523	40	40	45	34
29	33	297	36	27	44	160	94	854	35	32	31	37
30	32	174	35	28	---	126	122	397	34	33	31	37
31	29	---	30	26	---	98	---	202	---	31	29	---
TOTAL	1479	2886	4449	840	4786	8736	5388	6345	2609	1202	1442	1220
MEAN	47.7	96.2	144	27.1	165	282	180	205	87.0	38.8	46.5	40.7
MAX	176	640	787	36	962	1710	461	1050	247	106	379	114
MIN	22	24	30	21	25	35	59	35	34	28	23	25
CFSM	.46	.92	1.38	.26	1.59	2.71	1.73	1.97	.84	.37	.45	.39
IN.	.53	1.03	1.59	.30	1.71	3.12	1.93	2.27	.93	.43	.52	.44

CAL YR 1983 TOTAL 41895 MEAN 115 MAX 1700 MIN 21 CFSM 1.11 IN 14.99
WTR YR 1984 TOTAL 41382 MEAN 113 MAX 1710 MIN 21 CFSM 1.09 IN 14.80

05536290 LITTLE CALUMET RIVER AT SOUTH HOLLAND, IL

LOCATION.--Lat 41°36'25", long 87°35'52", in NE¼SE¼ sec.15, T.36 N., R.14 E., Cook County, Hydrologic Unit 07120003, on left bank at downstream side of bridge on Cottage Grove Avenue in South Holland, 2.0 mi downstream from Thorn Creek, and at mile 23.0.

DRAINAGE AREA.--208 mi^2.

PERIOD OF RECORD.--October 1947 to current year. Prior to October 1974, records published with those for streams in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR IL 1971-74).

REVISED RECORDS.--WSP 1507: 1950, 1953. WDR IL-81-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 575.00 ft National Geodetic Vertical Datum of 1929 (Illinois Department of Transportation bench mark). Prior to Oct. 27, 1947, nonrecording gage and Oct. 27, 1947, to Mar. 31, 1981, water-stage recorder at site 1.4 mi upstream at same datum. Apr. 1 to Nov. 8, 1981, nonrecording gage at same site and datum. Nov. 17, 1947, to Nov. 19, 1970, auxiliary water-stage recorder at Dixmoor, 4.7 mi downstream; prior to Nov. 17, 1947, nonrecording gage at the Dixmoor site read twice daily.

REMARKS.--Records poor. Flow from upper Little Calumet River is diverted to Lake Michigan by Burns ditch. Calumet Sag Channel, 6.6 mi below station, diverts the entire flow to the Mississippi River basin.

AVERAGE DISCHARGE.--37 years, 185 ft^3/s, 12.07 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,440 ft^3/s July 14, 1957, gage height, 20.11 ft, site then in use; maximum gage height, 20.20 ft June 14, 1981; minimum daily discharge, 7.9 ft^3/s Oct. 6, 1950.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 6, 1947, reached a stage of 19.24 ft, from floodmarks, discharge, 4,760 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,550 ft^3/s Mar. 16, gage height, 16.46 ft; minimum daily, 30 ft^3/s Oct. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	37	280	60	51	103	209	213	380	56	35	173
2	38	43	186	60	65	112	182	161	300	50	32	110
3	36	49	155	63	112	122	231	147	240	52	37	62
4	35	68	186	74	102	122	514	204	200	52	53	55
5	34	76	177	82	88	123	400	165	183	53	40	55
6	31	68	291	84	83	111	286	150	177	62	37	48
7	30	58	302	78	69	101	219	126	160	55	35	44
8	42	50	239	68	62	93	184	111	130	49	52	43
9	42	47	192	60	60	87	168	99	400	42	57	60
10	31	74	196	57	88	82	192	95	263	39	534	47
11	34	110	542	53	230	79	133	94	170	203	295	33
12	158	100	1220	50	990	72	173	113	135	134	112	35
13	114	82	873	48	1600	70	356	119	153	94	67	49
14	60	66	681	46	1290	77	304	100	355	68	55	95
15	45	62	820	47	750	365	341	80	215	57	53	60
16	41	85	520	48	545	2250	625	69	200	50	45	52
17	40	109	317	48	440	2020	813	67	173	47	103	45
18	42	64	230	47	391	969	615	67	130	45	86	42
19	34	71	190	46	469	679	445	62	103	42	53	37
20	47	128	160	50	393	1320	372	289	76	44	42	38
21	291	122	150	48	304	1450	276	288	127	53	37	38
22	233	89	140	52	254	1110	547	540	354	54	40	35
23	372	480	120	55	221	844	833	1570	218	50	42	107
24	182	403	105	58	197	805	522	1310	172	128	40	101
25	106	193	90	63	169	691	354	778	102	143	40	229
26	76	124	88	61	146	660	278	772	84	88	43	176
27	61	283	88	66	136	561	240	573	78	121	43	76
28	49	1020	80	60	117	499	301	905	70	66	90	57
29	41	664	78	56	108	403	204	1400	63	48	56	51
30	44	373	74	57	---	314	242	800	55	47	48	50
31	40	---	64	54	---	250	---	500	---	42	43	---
TOTAL	2467	5198	8834	1799	9530	16544	10559	11967	5466	2134	2345	2103
MEAN	79.6	173	285	58.0	329	534	352	386	182	68.8	75.6	70.1
MAX	372	1020	1220	84	1600	2250	833	1570	400	203	534	229
MIN	30	37	64	46	51	70	133	62	55	39	32	33
CFSM	.38	.83	1037	.28	1.58	2.57	1.69	1.86	.88	.33	.36	.34
IN.	.44	.93	1.58	.32	1.70	2.96	1.89	2.14	.98	.38	.42	.38

CAL YR 1983 TOTAL 83921 MEAN 230 MAX 2620 MIN 30 CFSM 1.11 IN. 15.01
WTR YR 1984 TOTAL 78946 MEAN 216 MAX 2250 MIN 30 CFSM 1.04 IN. 14.12

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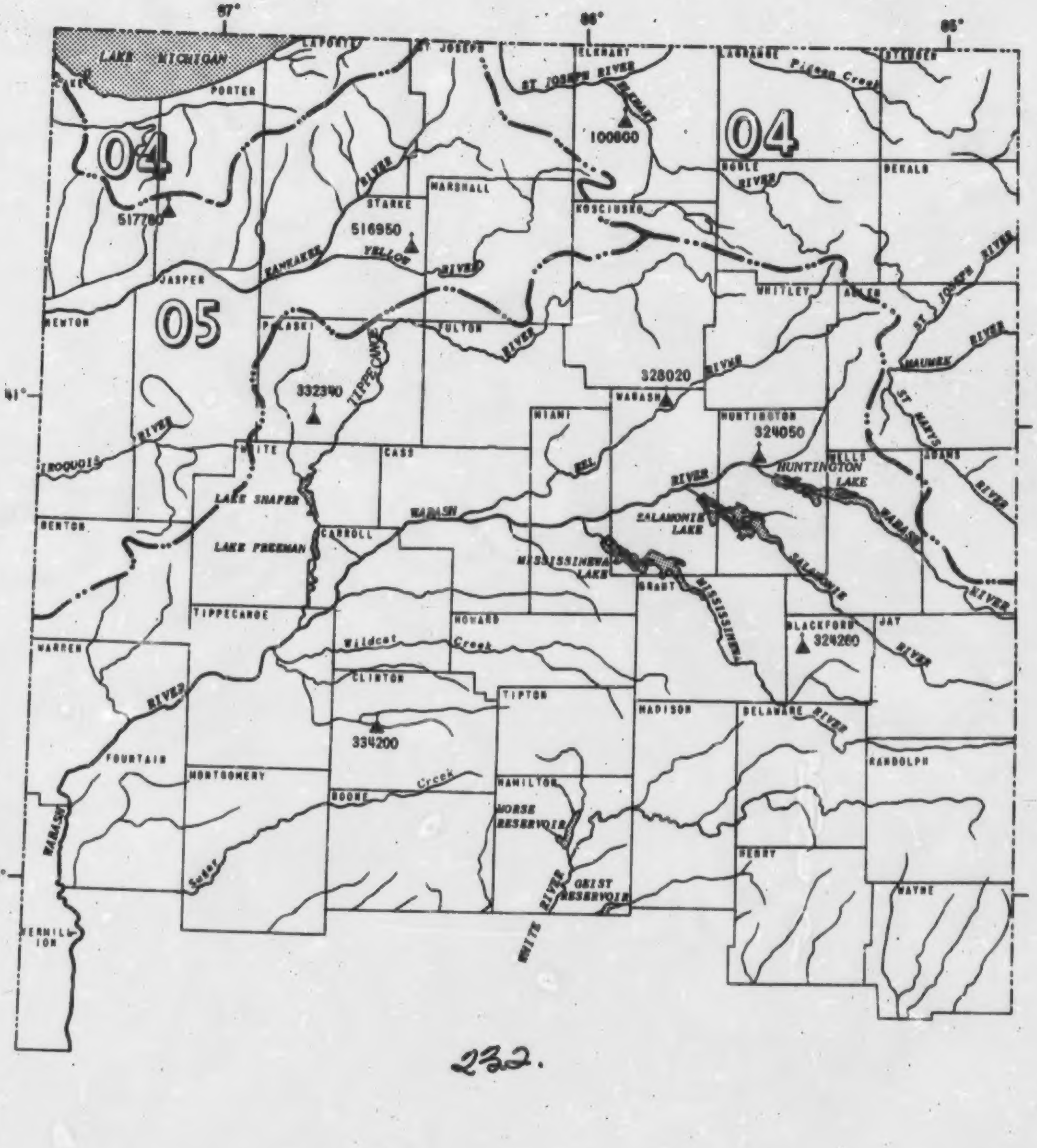
87°
86°
85°
LAKE MICHIGAN
LAKE
PORTER
LAPORTE
ST JOSEPH
ELKHART
LAGRANGE
STEUBEN
ST JOSEPH RIVER
ELKHART
Pigeon Creek
04
04
100800
517780
516950
STARKE
MARSHALL
KOSCIUSKO
NOBLE
DEKALB
KANKAKEE
RIVER
YELLOW RIVER
JASPER
05
NEWTON
PULASKI
FULTON
TIPPECANOE
RIVER
332340
41°
IROQUOIS RIVER
WHITE
CASS
MIAMI
EEL
WABASH
328020
WHITLEY
ALLEN
ST JOSEPH RIVER
MAUMEE RIVER
ST MARYS
HUNTINGTON
324050
HUNTINGTON LAKE
WELLS
ADAMS
RIVER
LAKE SHAFER
LAKE FREEMAN
CARROLL
WABASH RIVER
BENTON
SALAMONIE LAKE
MISSISSINEWA LAKE
GRANT
MISSISSINEWA
SALAMONIE
WABASH
RIVER
TIPPECANOE
HOWARD
Wildcat Creek
BLACKFORD
324280
JAY
RIVER
WARREN
RIVER
CLINTON
TIPTON
MADISON
DELAWARE
RIVER
334200
FOUNTAIN
MONTGOMERY
BOONE
Creek
Sugar
HAMILTON
MORSE RESERVOIR
GEIST RESERVOIR
WHITE RIVER
RANDOLPH
HENRY
WAYNE
WABASH
40°
VERMILLION

232.

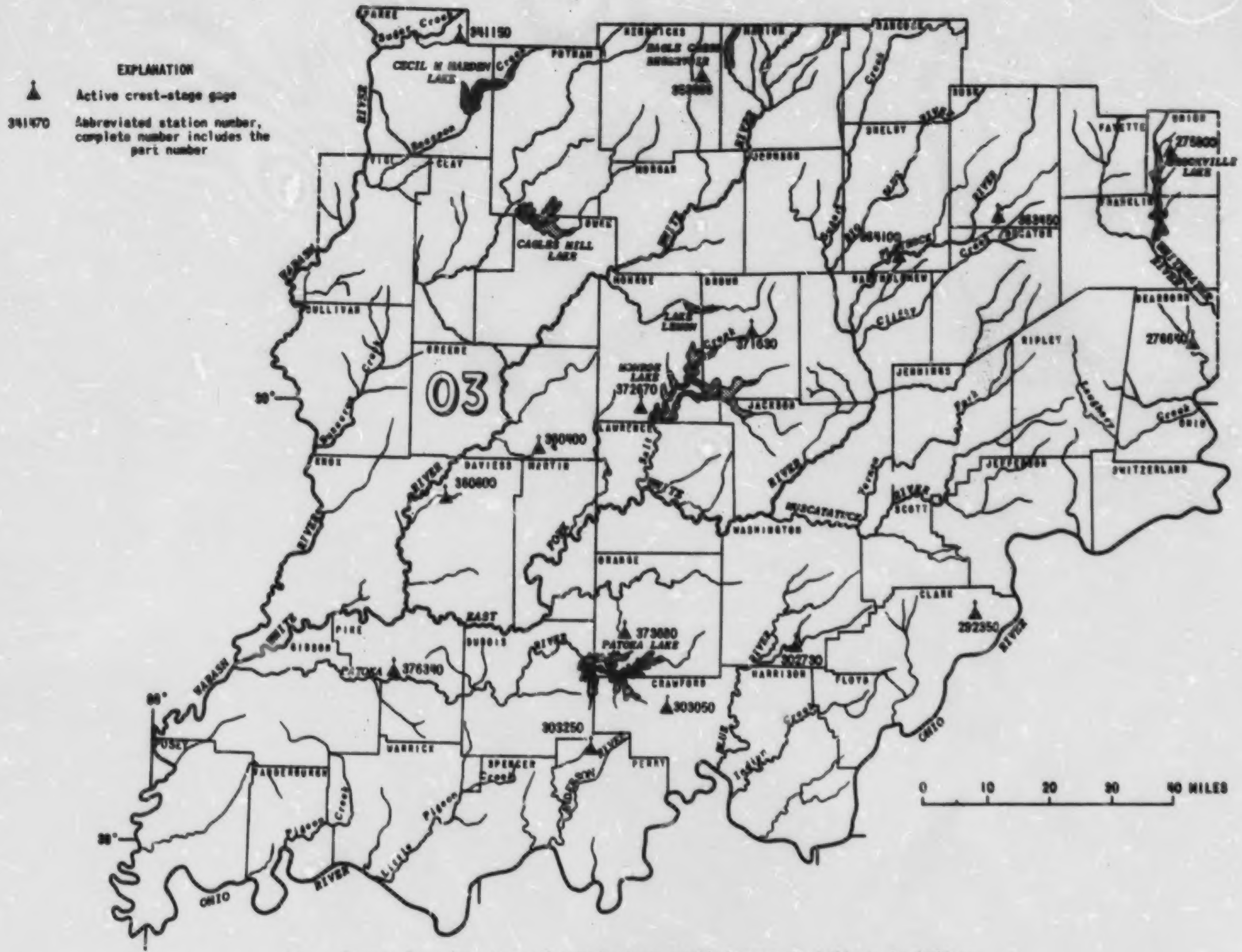
EXPLANATION
Active crest-stage gage
341470 Abbreviated station number, complete number includes the part number
PARKE
Sugar Creek
341150
CECIL M HARDEN LAKE
PUTNAM
VIGO
CLAY
HENDRICKS
EAGLE CREEK RESERVOIR
MARION
HANCOCK
RUSH
SHELBY
FAYETTE
UNION
275800
BROOKVILLE LAKE
MORGAN
JOHNSON
OWEN
CAGLES MILL LAKE
FRANKLIN
363450
364100
DECATUR
BARTHOLOMEW
MONROE
BROWN
LAKE LEMON
371630
DEARBORN
276690
RIPLEY
SULLIVAN
GREENE
03
MONROE LAKE
372670
JENNINGS
JACKSON
LAURENCE
360400
KNOX
DAVIESS
MARTIN
360800
JEFFERSON
SWITZERLAND
OHIO
MUSCATATUCK
SCOTT
WASHINGTON
ORANGE
CLARK
292350
373080
PATOKA LAKE
PIKE
GIBSON
DUBOIS
PATOKA
376340
302730
HARRISON
FLOYD
CRAWFORD
303050
303250
POSEY
VANDERBURGH
WARRICK
SPENCER
PERRY
WABASH RIVER
WHITE RIVER
OHIO RIVER
BLUE RIVER
Indian Creek
Pigeon Creek
Little Pigeon Creek
ANDERSON RIVER
38°
39°
0 10 20 30 40 MILES

Figure 5.-- Location of crest-stage partial-record stations in Indiana.

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Station number	Station name	Location	Drainage area (mi²)	Period of record	Annual Maximum		
					Date	Gage height (ft)	Discharge (ft³/s)
		OHIO RIVER BASIN					
		Great Miami River basin					
03275800	West Run near Liberty, IN	Lat 39°38'24", long 84°57'18", in SE¼SE¼SW¼ sec.2, T.14 N., R.2 W., Union County, at culvert on State Highway 44, 4.8 miles east of Fayette-Union County Line, 1.1 miles west of Liberty.	.26	1973-	08-04-84	5.76	43
		Tanners Creek basin					
03276640	Tanners Creek tributary near Lawrenceburg, IN	Lat 39°09'18", long 84°52'20", in NW¼SW¼NE¼ sec.27, T.6 N., R.1 W., Dearborn County, at culvert on State Highway 1, 0.25 mile east of Salt Fork Road.	.19	1973-	No marks all year		<46
		Fourteenmile Creek basin					
03292350	Flag Run tributary near New Washington, IN	Lat 38°31'08", long 85°32'29", in NW¼NW¼NE¼ sec.20, T.1 N., R.9 E., Clark County, at culvert on State Highway 62, 3.0 miles south of New Washington.	.16	1973-	12-12-83	5.27	5
		Blue River basin					
03302730	South Fork Blue River near Palmyra, IN	Lat 38°26'07", long 86°04'55", in NE¼NW¼ sec.4, T. 15 N., R.4 E., Washington County, at bridge on Old Palmyra Road, 0.2 mile north of State Highway 135 and 4.7 miles north of the intersection of U.S. Highway 150 and State Highway 135 in Palmyra.	64.3	1974-	04-22-84	17.89	2,000
		Little Blue River basin					
03303050	Bird Hollow Creek at English, IN	Lat 38°21'02", long 86°28'01", in SE¼NE¼NW¼ sec.13, T.2 S., R.1 W., Crawford County, at bridge on State Highway 37, 0.7 mile north of State Highway 64.	9.31	1974-	07-05-84	9.61	575
		Anderson River basin					
03303250	Sigler Creek tributary at Uniontown, IN	Lat 38°13'21", long 86°41'50", in NW¼SW¼SW¼ sec.25, T.3 S., R.3 W., Perry County, at culvert on State Highway 145, 0.1 mile south of State Highway 62 and U.S. Highway 460.	.15	1973-	03-16-84	9.07	130
		Wabash River basin					
03324050	Clear Creek near Huntington, IN	Lat 40°54'57", long 85°32'42", in SE¼NE¼NW¼ sec.5, T.28 N., R.9 E., Huntington County, at bridge on State Highway 16, 0.8 mile west of State Highway 5, and 3.4 miles northwest of Huntington.	49[a]	1974-80 1983-	02-13-84	13.14	2200

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Crest-stage partial-record stations--Continued

OHIO RIVER BASIN--Continued

Wabash River basin--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Annual Maximum		
					Date	Gage height (ft)	Discharge (ft^3/s)
03324260	Salamonie River tributary near Montpelier, IN	Lat 40°33'06", long 85°19'25", in NW¼NW¼NE¼ sec.7, T.24 N., R.11 E., Blackford County, at culvert on State Highway 18, 2.5 miles east of State Highway 3.	.86	1973-	07-05-84	7.89	144
03328020	Otter Creek tributary near North Manchester, IN	Lat 40°59'59", long 85°49'37", in SW¼SE¼SW¼ sec.35, T.30 N., R.6 E., Wabash County, at culvert on State Highway 114, 1.7 miles west of State Highway 13.	.92	1973-	03-16-84	5.97	90
03332340	Weltzin ditch tributary near Francesville, IN	Lat 40°48'00", long 86°46'33", in SW¼NW¼NW¼ sec.16, T.29 N., R.3 W., Pulaski County, at culvert on State Highway 39, 6.1 miles south of State Highway 14.	.50	1973-	05-26-84	5.91	14
03334200	Prairie Creek tributary near Frankfort, IN	Lat 40°15'14", long 86°30'36", in NW¼SE¼NE¼ sec.22, T.21 N., R.1W., Clinton County, at culvert on State Highways 38 and 39, 1.8 miles south of State Highway 28 in Frankfort.	2.61	1973-	03-25-84	6.51	95
03341150	Demeree Creek tributary near Byron, IN	Lat 39°52'39", long 87°05'56", in NW¼SW¼NE¼ sec.33, T.17 N., R.6 W., Parke County, at culvert on State Highway 47, 0.5 mile west of Montgomery County Line.	.15	1973-	07-05-84	7.27	52
03353668	White Lick Creek tributary near Brownsburg, IN	Lat 39°53'54", long 86°23'34", in SE¼NE¼SE¼ sec.22, T.17 N., R.1 E., Hendricks County, at culvert on State Highway 267, 4.0 miles north of U.S. Highway 136 in Brownsburg.	.31	1973-	07-04-83 03-16-84	6.03 5.97	65 60
03360400	Doans Creek tributary near Doans, IN	Lat 38°55'12", long 86°50'54", in SW¼SW¼SW¼ sec.27, T.6 N., R.4 W., Greene County, at culvert on State Highway 58 at Doans.	.20	1973-	04-05-84	6.86	68
03360600	Smothers Creek near Plainville, IN	Lat 38°48'43", long 87°07'48", in SE¼NW¼ sec.1, T.4 N., R.7 W., Daviess County, at county road bridge, 1.3 miles northeast of State Highway 57 in Plainville.	33[a]	1973-	04-22-84	15.95	960
03363450	Little Flatrock River at Milroy, IN	Lat 39°29'49", long 85°28'24", in NE¼NW¼ sec.13, T.12 N., R.9 E., Rush County, at bridge on State Highway 244, 800 ft east of State Highway 3, and at west edge of Milroy.			03-16-84	10.91	970
03364100	Tough Creek near Norristown, IN	Lat 39°22'19", long 85°45'38", in SW¼SW¼NW¼ sec.28, T.11 N., R.7 E., Shelby County, at culvert on county road, 0.5 mile north of Norristown.	1.46	1973-	04-22-84	6.98	86
03371630	North Fork Salt Creek tributary near Nashville, IN	Lat 39°11'38", long 86°12'11", in NE¼NE¼NW¼ sec.28, T.9 N., R.3 E., Brown County, at culvert on State Highway 46, 2.6 miles east of State Highway 135 in Nashville.	.22	1973-	04-04-84	6.54	22
03372670	Jackson Creek near Bloomington, IN	Lat 39°07'17", long 86°30'50", in SW¼SW¼ sec.15, T.8 N., R.1 W., Monroe County, at bridge on Rhorer Road 0.95 mile east of State Highway 37 on the south side of Bloomington.	4.66	1974-76[b] 1977-[a]	04-04-84	4.90	1160

Crest-stage partial-record stations--continued

Station number	Station name	Location	Drainage area (mi²)	Period of record	Annual Maximum Date	Annual Maximum Gage height (ft)	Annual Maximum Discharge (ft³/s)
		OHIO RIVER BASIN--Continued					
		Wabash River basin--Continued					
03373680	French Lick Creek tributary near French Lick, IN	Lat 38°30'08", long 86°36'20", in SW¼NW¼SW¼ sec.23, T.1 N., R.2 W., Orange County, at culvert on State Highway 145, 4.3 miles south of intersection of State Highways 145 and 56 in French Lick.	.29	1973-	no marks found		
03376340	Patoka River tributary near Glesen, IN	Lat 38°23'41", long 87°19'05", in NE¼SE¼SE¼ sec.29, T.1 S., R.8 W., Pike County, at culvert on State Highway 57, 7.9 miles south of intersection of State Highways 61, 56, and 57 in Petersburg.	.84	1973-	05-11-84	7.28	122
		STREAMS TRIBUTARY TO LAKE MICHIGAN					
		St. Joseph River basin					
04100800	Yellow Creek at Dunlap, IN	Lat 41°38'44", long 85°56'00",in NE¼NE¼ sec.27, T.37 N., R.5 E., Elkhart County, at bridge on U.S. Highway 33, at northwest edge of Dunlap.	33[a]	1974-80 1983-	03-16-84	11.41	420
		UPPER MISSISSIPPI RIVER BASIN					
		Illinois River basin					
05516950	Eagle Creek near Grovertown, IN	Lat 41°18'44", long 86°31'27", in NE¼SE¼NE¼ sec.16, T.33 N., R.1 W., Starke County, at bridge on State Highway 23, 0.3 mile south of County Road 100 north, and 5.2 miles south of U.S. Highway 30 in Grovertown.	32[a]	1973-	-84	<8.96	<130
05517780	Cobb ditch near Valparaiso, IN	Lat 41°24'41", long 87°08'08", in NE¼NE¼SW¼ sec.8, T.34 N., R.6 W., Porter County, at culvert on State Highway 2, 5.7 miles southwest of Valparaiso.	.39	1973-	02-12-84	6.97	39

[a] About.
[b] Insufficient data for peak.

Measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations are given for 1984 in the following table.

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
		OHIO RIVER BASIN				
		Wabash River basin				
Fall Creek	White River	Lat 39°53'27", long 85°59'51", in NE¼SE¼ sec.30, T.17N., R.5E., Marion County, at East 75th Street bridge, in Indianapolis.	217	1983	09-06-84	59.2
Fall Creek	White River	Lat 39°49'37", long 86°07'45", in SW¼SE¼sec.18, T.16N., R.4E., Marion County, at East 39th Street bridge, in Indianapolis.		1983	09-06-84	38.7
Pogues Run	White River	Lat 39°25'44", long 86°10'21", in NW¼SW¼ sec.11, T.15N., R.3E., Marion County, at mouth, and 1900 ft north of Morris Street Bridge, in Indianapolis.		1982, 1983	08-21-84	.70
White River tributary	White River	Lat 39°45'22", long 86°10'20", in NW¼SW¼ sec.11, T.15N., R.3E., Marion County, at mouth, 200 ft downstream from Pogues Run, and 1700 ft upstream from Morris Street bridge, in Indianapolis.		1982, 1983	08-21-84	<.006
Pleasant Run	White River	Lat 39°43'58", long 86°09'21", in SW¼NW¼sec. 24, T.15N., R.3E., Marion County, between Madison Ave. and Meridian Street, in Indianapolis.	20.6	1983	10-11-83 08-21-84	2.79 2.63
Eagle Creek	White River	Lat 39°44'10", long 86°11'47", on line between secs. 21 and 22, T.15N., R.3E., Marion County, at Raymond Street bridge, in Indianapolis.		1982, 1983	08-21-84	30.9
Lick Creek	White River	Lat 39°42'10", long 86°11'12", in SE¼SW¼ sec.27, T.15 N., R.3 E., Marion County, at Harding Street bridge, in Indianapolis and 0.8 mile upstream from mouth.		1974, 1981- 1983	08-21-84	1.58
White River	Wabash River	Lat 39°42'30", long 86°12'31", in SE¼SW¼ sec.28, T.15N., R.3E., Marion County, 0.4 mile downstream from IPALCO dam in Indianapolis, and 0.5 mile downstream from Lick Creek.	1,900	1981- 1983	08-21-84	316
Hanseisen ditch	White River	Lat 39°41'33", long 86°13'14", in SW¼SE¼ sec. 32, T.15N., R.3E., Marion County, at I-465 bridge over White River, in Indianapolis, and 0.1 mile upstream from mouth.		1981- 1983	08-21-84	10.3
White River	Wabash River	Lat 39°40'55", long 86°13'30", in NW¼SE¼ sec. 5, T.14N., R.3E., Marion County, 0.7 mile downstream from I-465 bridge over White River, in Indianapolis, and 1.7 miles upstream from Little Buck Creek.		1981- 1983	08-21-84	313
Little Buck Creek	White River	Lat 39°40'10", long 86°12'56", on line between secs. 8 and 9, T.14 N., R.3E., Marion County, 0.5 mile northeast of Southport WWTP, and 1.2 miles upstream from mouth.		1981- 1983	08-21-84	.92
White River	Wabash River	Lat 39°39'47", long 86°14'10", on line between secs. 7 and 18, T.14 N., R.3E., Marion County, at Southport Road bridge, 0.25 mile downstream from Little Buck Creek and 0.7 mile west of Southport WWTP.	1,945	1965, 1982, 1983	10-12-83 08-21-84	266 431
White River	Wabash River	Lat 39°36'23", long 86°14'30", in NW¼SW¼ sec.6, T.13N., R.3E., Johnson County, 0.9 mile downstream from Honey Creek, and 2.5 miles west of Smith Valley.		1981- 1983	08-21-84 08-21-84 08-22-84	408 412 419

Measurements at miscellaneous sites--Continued

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
		OHIO RIVER BASIN--Continued				
		Wabash River basin--Continued				
White River	Wabash River	Lat 39°34'02", long 86°15'20", in NW¼SE¼ sec13, T.13N., R.2E., Morgan County, at State Highway 144 bridge, and 1.1 miles northeast of Waverly.	2,026	1965, 1973, 1974, 1982, 1983	10-12-83 08-21-84	306 528
White River	Wabash River	Lat 39°31'54", long 86°18'25", on line between secs. 27 and 28, T.13 N., R.2E., Morgan County, 3500 ft upstream from Crooked Creek, and 2.6 miles southwest of Waverly.		1982, 1983	08-21-84 08-22-84	498 446
White River	Wabash River	Lat 39°29'57", long 86°21'19", in NE¼NW¼ sec.7, T.12N., R.2E., Morgan County, at Henderson Road bridge, 1.4 miles downstream from Stotts Creek, and 2.4 miles southeast of Centerton.		1974, 1982, 1983	08-21-84	502
White Lick Creek	White River	Lat 39°30'49", long 86°22'48", on line between secs. 1 and 2, T.12N., R.1E., Morgan County, at County Road 590 North bridge, and 0.8 mile east of Centerton.	288	1974, 1981-1983	08-21-84	17.0
White River	Wabash River	Lat 39°26'01", long 86°26'58", in NE¼SW¼ sec.32, T.12N. R.1E., Morgan County, at State Highway 39 bridge, and 1.3 miles northwest of Martinsville.	2,486	1925-27, 1930-32, 1946, 1948, 1965, 1967, 1970, 1982, 1983	08-21-84	526
White River	Wabash River	Lat 39°24'12", long 86°27'43", in NW¼SE¼ sec.7, T.11N., R.1E., Morgan County, below Martinsville WWTP, and 2.4 miles southwest of Martinsville.		1981-1983	08-21-84 08-21-84	548 561
White River	Wabash River	Lat 39°22'23", long 86°33'32", in NW¼SW¼ sec.20, T.11 N., R.1W., Morgan County, at Paragon bridge, 1,200 feet upstream from Bryant Creek, and 1.5 miles south of Paragon.		1965, 1982, 1983	08-21-84	597
Patoka River	Wabash River	Lat 38°22'47", long 87°01'00", in SW¼SW¼ sec.31, T.1S., R.5W., Dubois County, at County Road 600 West bridge, 0.3 mile upstream from Altar Creek, and 2.7 miles south of Ireland.	466	1983	07-17-84	61
Flat Creek	Patoka River	Lat 38°23'08", long 87°03'29", in NE¼SE¼ sec.34, T.1S., R.6W., Dubois County, at County Road 50 North bridge, 0.2 mile upstream from Sulphur Springs Brook, and 3.9 miles southwest of Ireland.	51.5	1983	07-17-84	.88
Beadens Creek	Cup Creek	Lat 38°19'01", long 87°07'57", in NW¼NE¼ sec.25, T.2S., R.7W., Pike County, at County Road bridge, 0.35 mile north of State Highway 257, 0.55 miles north of State Highway 64, and 3.3 miles east of Augusta.	2.61	1983	07-17-84	.35
Mill Creek	Patoka River	Lat 38°22'09", long 87°11'14", in NE¼SE¼ sec.4, T.2S., R.7W., Pike County, at County Road bridge, 0.95 mile north of State Highway 364, 1.8 miles southeast of Winslow, and 2.6 miles north of Augusta.	2.82	1983	07-19-84	.64
Patoka River tributary	Patoka River	Lat 38°21'20", long 87°11'37", in SE¼NW¼ sec.9, T.2S., R.7W., Pike County, at bridge on State Highway 364, 0.8 mile above mouth, 1.6 miles north of Augusta, and 2.3 miles east of State Highway 61.	0.92	1983	07-19-84	.24

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Measurements at miscellaneous sites--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		OHIO RIVER BASIN--Continued				
		Wabash River basin--Continued				
Patoka River	Wabash River	Lat 38°22'48", long 87°13'00", in SW¼SW¼ sec.32, T.1S. R.7W., Pike County, at bridge on State Highway 61, and at south side of Winslow.	603	1961-74, 1976, 1977, 83	07-19-84	63
Stone Coe Creek	Patoka River	Lat 38°25'40", long 87°13'12", on line between secs. 29 and 30, T.1S., R.7W., Pike County, at State Highway 61 bridge, and 0.9 mile north of Winslow.	4.05	1964, 65 1983	07-19-84	2.7
Barren ditch	Patoka River	Lat 38°22'00", long 87°15'22", in NW¼SW¼ sec.1, T.2S., R.8W., Pike County, at County Road bridge, 0.7 mile east of Murch, and 5.2 miles northeast of Oakland City.	5.80	1983	07-19-84	.94
Sugar Creek	Patoka River	Lat 38°25'03", long 87°16'41", on line between secs. 34 and 35, T.1S., R.8W., Pike County, 200 feet east of Line Road, 350 feet above mouth, and 2.6 miles southeast of Glezen.	3.74	1983	07-18-84	.08
Patoka River	Wabash River	Lat 38°22'57", long 87°19'59", in NW¼SW¼ sec.32, T.1S., R.8W., Pike County, at bridge on State Highway 57, 0.75 mile north of Dongola, and 2.9 miles southwest of Glezen.	650	1983	07-18-84	70
South Fork Patoka River tributary	South Fork Patoka River	Lat 38°14'17", long 87°10'55", in NE¼SE¼ sec.21, T.3S., R.7W., Pike County, at County Road bridge, 0.5 mile north of Warrick-Pike County line, 0.6. mile upstream from mouth, and 2.9 miles southwest of Stendal.	3.99	1983	07-17-84	.54
South Fork Patoka River	Patoka River	Lat 38°14'45", long 87°11'21", on line between secs. 16 and 21, T.3S., R.7W., Pike County, at County Road bridge, 1 mile north of Warrick-Pike County line, and 2.9 miles southwest of Stendal.		1964, 83	07-17-84	.61
Durham ditch	South Fork Patoka River	Lat 38°17'34", long 87°13'25", in NW¼SE¼ sec.31, T.2S., R.7W., Pike County, at County Road bridge, 0.25 mile above mouth, and 3.2 miles southwest of Augusta.	6.26	1983	07-18-84	2.1
Rough Creek	South Fork Patoka River	Lat 38°17'08", long 87°14'32", on line between sec.6, T.3S., R.7W., and sec.1, T.3S., R.8W., Pike County, at County Road bridge, 1.3 miles west of Scottsburg, 1.1 miles east of Enos Corner and State Highway 61.	9.99	1964, 83	07-17-84	6.5
Honey Creek	South Fork Patoka River	Lat 38°17'22", long 87°15'55", on line between sec.35, T.2S., R.8W., and sec.2, T.3S., R.8W., Pike County, at bridge on Blackfoot Road, 0.25 mile west of State Highway 61 and Enos Corner, and 0.65 mile above mouth.	8.98	1965, 83	07-18-84	2.2
South Fork Patoka River	Patoka River	Lat 38°22'40", long 87°20'14", in SE¼SE¼ sec.31, T.1S., R.8W., Gibson County, at bridge on State Highway 57, 0.4 mile north of Dongola, 0.9 mile above mouth, and 3.4 miles southwest of Glezen.	76.3	1966, 1967, 1983	07-18-84	17
Patoka River	Wabash River	Lat 38°22'38", long 87°22'14", on line between secs., 1 and 2, T.2S., R.9W., Pike County, at bridge on Miller Road, 3.0 miles northwest of Oakland City, and 4.6 miles southwest of Glezen.		1965, 1967, 1983	07-18-84	95

DISCONTINUED GAGING-STATION RECORDS

The following table lists all discontinued stream-gaging stations in Indiana. Continuous daily streamflow records were collected and published for the period of record, shown in water years, for each station.

Station no.	Station name	County	Drainage area (mi^2)	Period of Record
03275500	East Fork Whitewater River at Richmond	Wayne	121	1949-78
03277000	Laughery Creek near Farmers Retreat	Ohio	248	1941-73[a]
03303276	Friday Branch tributary near Saint Meinrad	Dubois	.096	1981[b]
03304000	Little Pigeon Creek near Tennyson	Warrick	187	1944-47
03323000	Wabash River at Bluffton	Wells	532	1931-71[b]
03326000	Mississinewa River near Eaton	Delaware	310	1952-71[b]
03329500	Wabash River at Delphi	Carroll	4,072	1940-71
03331000	Tippecanoe River near Warsaw	Kosciusko	126	1943-49
03332000	Tippecanoe River at Pulaski	Pulaski	1,089	1928-31
03332300	Little Indian Creek near Royal Center	White	35.0	1959-73[a]
03332400	Big Monon Creek near Francesville	Pulaski	152	1959-73[a]
03332500	Tippecanoe River near Monticello	White	1,732	1932-81[c]
03333500	Wildcat Creek at Greentown	Howard	168	1945-61
03334000	Wildcat Creek at Owasco	Carroll	396	1944-73[a]
03339120	Coal Creek at Coal Creek	Fountain	214	1965-72
03339150	Little Vermilion River near Newport	Vermillion	237	1965-72
03339855	Sugar Creek tributary near Deer Mill	Montgomery	.45	1981[b]
03340000	Sugar Creek near Byron	Parke	670	1941-71[b]
03341000	Big Raccoon Creek at Mansfield	Parke	248	1939-58[d]
03341200	Little Raccoon Creek near Catlin	Parke	134	1957-71[d,e]
03341420	Brouillette Creek near Universal	Vermillion	321	1966-71[b]
03341470	North Coal Creek near Terre Haute	Vigo	1.91	1974-76
03341570	Honey Creek near Riley	Vigo	5.79	1981[b]
03342250	Mud Creek near Dugger	Sullivan	11.9	1966-81
03342350	Buttermilk Creek near Paxton	Sullivan	16.5	1966-73
03342360	Buttermilk Creek near Sullivan	Sullivan	17.6	1975-78
03342800	South Fork Smalls Creek at Bruceville	Knox	4.94	1972-75[b,e]
03348100	Killbuck Creek near Anderson	Madison	97.8	1964-68
03348500	White River near Noblesville	Hamilton	828	1915-26, 1929-74[b]
03349500	Cicero Creek near Arcadia	Hamilton	131	1955-76[a]
03349700	Little Cicero Creek near Arcadia	Hamilton	40.4	1956-76[a]
03350000	Cicero Creek near Cicero	Hamilton	196	1946-54
03350100	Hinkle Creek near Cicero	Hamilton	18.5	1956-76[a]
03350500	Cicero Creek at Noblesville	Hamilton	216	1950-80[d]
03352000	Lawrence Creek at Fort Benjamin Harrison	Marion	2.74	1952-56, 1958-69
03352200	Mud Creek at Indianapolis	Marion	42.4	1958-76[a]
03353160	Pleasant Run at Brookville Road at Indianapolis	Marion	10.1	1960-81
03355000	Bear Creek near Trevlac	Brown	6.94	1952-73[a]
03356000	Beanblossom Creek at Dolan	Monroe	100	1946-78
03356500	Beanblossom Creek near Bloomington	Monroe	112	1931-33
03357000	White River at Spencer	Owen	2,988	1925-71[d]
03357420	Big Walnut Creek at Greencastle	Putnam	216	1975-1982
03359500	Deer Creek near Putnamville	Putnam	59.0	1955-65, 1968-72
03359980	Jordan Creek near Jordan	Owen	25.9	1981[b]
03366000	Graham Creek near Vernon	Jennings	77.2	1955-73
03367000	Muscatatuck River near Austin	Jackson	359	1932-43, 1944-71[f]
03367500	Stucker Creek near Austin	Scott	127	1932-33
03370000	Vernon Fork near Crothersville	Jackson	391	1932-33
03370500	Muscatatuck River near Tampico	Washington	960	1939
03371000	Muscatatuck River near Vallonia	Jackson	1,134	1932-33
03371600	South Fork Salt Creek at Kurtz	Jackson	38.2	1961-71[g]
03371650	North Fork Salt Creek at Nashville	Brown	76.1	1962-76[a]
03372000	North Fork Salt Creek near Belmont	Brown	120	1946-71
03372700	Clear Creek near Harrodsburg	Monroe	55.2	1960-71
03373000	Salt Creek near Peerless	Lawrence	573	1939-50, 1957-71[d]
03373200	Indian Creek near Springville	Lawrence	60.7	1961-73[a]
03374100	White River at Hazleton	Gibson	11,305	1928-38[h]
03376000	Patoka River near Jasper	Dubois	348	1944-47[e]
03376260	Flat Creek near Otwell	Pike	21.3	1965-1982
03376279	Little Flat Creek near Otwell	Dubois	6.56	1981[b]
03376300	Patoka River at Winslow	Pike	603	1964-74
03378500	Wabash River at New Harmony	Posey	29,234	1939-47[h]

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Station no.	Station name	County	Drainage area (mi^2)	Period of Record
	STREAMS TRIBUTARY TO LAKE MICHIGAN			
04093200	Little Calumet River at Gary	Lake	5.82	1958-67, 1969-71
04090500	Dunes Creek at Porter	Porter	3.40	1979-1982
04095100	Derby ditch at Beverly Shores	Porter	4.64	1980
04098000	Fawn River at Orland	Steuben	86.4	1943-47
04099500	Pigeon Creek and Hogback Lake near Angola	Steuben	103	1946-74
04099610	Pretty Lake Inlet near Stroh	Lagrange	1.96	1963-80
04100000	Christiana Creek at Elkhart	Elkhart	127	1947-52
04100220	North Branch Elkhart River near Cosperville	Noble	134	1951-71
	STREAMS TRIBUTARY TO LAKE ERIE			
04178500	St. Joseph River at Hursh	Allen	734	1950-54
04179000	St. Joseph River at Cedarville	Allen	763	1931-32, 1956-81
04179500	Cedar Creek near Auburn	DeKalb	87.3	1943-73[a]
04180500	St. Joseph River near Ft. Wayne	Allen	1,057	1905-06, 1941-55
04182700	St. Marys River at Ft. Wayne	Allen	810	1905-06
	UPPER MISSISSIPPI RIVER BASIN			
05516000	Yellow River near Bremen	Marshall	135	1955-73[a]
05518500	Singleton ditch near Hebron	Lake	34.2	1949-51
05519500	West Creek near Schneider	Lake	54.7	1948-52, 1954-72
05520000	Singleton ditch at Illinoi, Il	Kankakee, Il	220	1945-77
05521500	Oliver ditch near Aix	Jasper	79.6	1948-51
05523500	Slough Creek near Collegeville	Jasper	83.7	1948-52 1953-82
05524000	Carpenter Creek at Egypt	Jasper	44.8	1948-52 1953-82

[a] Continued as a crest-stage and low-flow partial-record station.
[b] Some quality of water data available.
[c] Records of daily discharges furnished by Northern Indiana Public Service Company.
[d] Continued as a stage only station.
[e] Some record fragmentary.
[f] High-water records only.
[g] Stage only station 1972-75.
[h] Some quality of water data available after discontinuing of station for stream-gaging records.

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RECORDS AVAILABLE ON LAKES

For many years records of the water-surface elevations of many of the lakes in Indiana have been collected by the Geological Survey under cooperative agreement with the Indiana Department of Natural Resources. Basic data for a few selected lakes have been published in WSP 1363, entitled "Hydrology of Indiana Lakes." Records which have not been published are available in the files of the District Office of the Geological Survey in Indianapolis, Indiana. In general, the records before 1976 were based on once-daily readings of a staff gage by a local observer and consist of daily, monthly, and yearly mean water-surface elevations. Starting in 1976, water-stage recorders were installed at many stations which had previously been non-recording gages. Discharge measurements, made at the outflow, are also available in some instances.

The lakes for which records have been collected are listed by downstream order number in the following table. The established level, sometimes referred to as the legal level, is that elevation set by the courts to which the average level of the lake is to be held; it is normally set at about the average level that has prevailed for a number of years prior to the establishment of the level. Surface area and capacity of lake is that surface area and capacity at the established level. Depth contour maps are only those surveyed by the Water Resources Division of the Geological Survey. The inclusive years that records of stage have been collected at a lake are shown in the last column. If records are still being collected on a current basis, there is no closing date shown.

Lakes in the Ohio River basin for which records are available

	Lake	County	Drainage (mi^2)	Surface Area (acres)	Established Levelxx	Capacity (acre feet)	Contour Map available	Records available
		LAUGHERY CREEK BASIN						
03276800	Versailles Lake near Versailles	Ripley	168.0	232	--------	------	-	1957-
		BAYOU DRAIN BASIN						
03322300	Hovey Lake near Mount Vernon	Posey	6.36	253	--------	------	-	1950-69
		WABASH RIVER BASIN						
03327550	Everett Lake at Levert	Allen	1.07	43	835.13	650	+	1946-66
03327600	Blue Lake near Churubusco	Whitley	3.58	239	850.28	5,010	+	1946-69, 1976-
03327650	Shriner Lake at Tri-Lakes	Whitley	.94	111	907.04	------	-	1943-
03327700	Cedar Lake at Tri-Lakes	Whitley	.79	131	901.90	------	-	1943-49
03327750	Round Lake at Tri-Lakes	Whitley	3.36	125	901.90	------	-	1943-53
03327800	Wilson Lake near Larwill	Whitley	.46	29	865.39	390	+	1946-52
03327850	Little Wilson Lake near Larwill	Whitley	.52	8	865.39	130	+	1946-52
03328100	Long Lake at Laketon	Wabash	.55	48	751.19	760	+	1946-51, 1959-
03328250	North Little Lake at Silver Lake	Kosciusko	2.89	12	861.73	170	+	1947-
03328350	Silver Lake at Silver Lake	Kosciusko	6.31	102	861.73	1,520	+	1947-
03328400	Lukens Lake near Disko	Wabash	1.76	46	763.60	1,010	+	1948-49, 1959-
03330020	Crooked Lake near Wolflake	Noble	1.51	206	905.69	9,040	+	1943-53
03330040	Big Lake near Wolflake	Noble	8.89	228	898.18	5,630	+	1943-75 1976-
03330060	Goose Lake near Lorane	Whitley	1.51	84	910.96	2,180	+	1945-53
03330080	Loon Lake at Ormas	Whitley	11.1	222	895.14	5,730	+	1943-66
03330100	New Lake near Etna	Whitley	.29	50	903.91	880	+	1945-53
03330120	Old Lake near Etna	Whitley	2.81	32	898.07	620	+	1949-66
03330140	Smalley Lake near Washington Center	Noble	27.1	69	--------	1,520	+	1943-
03330160	Gilbert Lake near Washington Center	Noble	.37	28	--------	490	+	1954-
03330180	Horseshoe Lake nr Washington Center	Noble	1.62	18	901.80	250	+	1945-66
03330200	Baugher Lake near Washington Center	Noble	31.0	32	878.52	390	+	1945-51
03330220	Wilmot Pond at Wilmot[1]	Noble	35.2	10	------	------	-	1945-51
03330240	Webster Lake at North Webster	Kosciusko	49.2	774	852.75	7,170	+	1943-
03330243	James Lake at Oswego	Kosciusko	55.9	282	836.40	7,580	+	1943-
03330260	Robinson Lake near Pierceton	Kosciusko	7.15	59	851.09	1,170	+	1946-51
03330280	Troy Cedar Lake near Lorane	Whitley	5.33	93	905.41	2,540	+	1945-52
03330300	Ridinger Lake near Pierceton	Kosciusko	34.6	136	843.12	2,900	+	1943-
03330320	Kuhn Lake near North Webster	Kosciusko	3.85	137	837.50	1,290	+	1945-
03330340	Big Barbee Lake near North Webster	Kosciusko	44.7	304	837.50	5,640	+	1945-
03330360	Little Barbee Lake nr North Webster	Kosciusko	49.0	74	837.50	960	+	1945-
03330380	Shoe Lake near Oswego	Kosciusko	.34	40	841.57	------	-	1946-53, 1972,74, 1976-
03330400	Banning Lake near North Webster	Kosciusko	.48	12	837.50	110	+	1945-
03330420	Irish Lake near North Webster	Kosciusko	50.9	182	837.50	2,330	+	1945-
03330440	Sechrist Lake near North Webster	Kosciusko	.58	105	837.50	2,490	+	1945-
03330460	Sawmill Lake near North Webster	Kosciusko	51.8	36	837.50	370	+	1945-
03330480	Tippecanoe Lake at Oswego	Kosciusko	113	768	836.40	28,380	+	1943-
03330495	Oswego Lake at Oswego	Kosciusko	113	83	836.40	780	+	1943-
03331010	Big Chapman Lake near Warsaw[2]	Kosciusko	4.17	581	827.75	6,080	+	1945-72, 1976-
03331020	Little Chapman Lake near Warsaw	Kosciusko	7.13	177	827.75	1,990	+	1945-72, 1976-
03331040	Pike Lake at Warsaw	Kosciusko	41.5	203	805.64	2,830	+	1954-
03331060	Fish Lake near Warsaw	Kosciusko	4.93	15	845.52	------	-	1951-66
03331080	Muskellunge Lake near Warsaw	Kosciusko	11.8	32	842.67	300	+	1943-53, 1959-71
03331100	Carr Lake near Claypool	Kosciusko	2.27	79	848.88	1,340	+	1947-53
03331120	Sherburn Lake near Pierceton[3]	Kosciusko	5.51	15	881.00	230	+	1954-
03331140	Winona Lake at Warsaw	Kosciusko	32.1	562	811.06	16,680	+	1943-

Lakes in the Ohio River basin for which records are available--Continued

	Lake	County	Drainage (square mile)	Surface Area (acres)	Established Levelxx	Capacity (acre feet)	Contour Map available	Records available
	WABASH RIVER BASIN--Continued							
03331160	Center Lake at Warsaw	Kosciusko	.73	120	803.86	2,060	+	1945-
03331180	Palestine Lake at Palestine	Kosciusko	32.4	290	--------	1,170	+	1954-
03331200	Crystal Lake near Atwood	Kosciusko	.45	76	789.69	930	+	1945-51
03331220	Hoffman Lake at Atwood	Kosciusko	8.07	180	785.85	3,160	+	1945-53
03331240	Beaver Dam Lake near Silver Lake	Kosciusko	2.83	146	868.95	3,280	+	1947-53
03331260	Loon Lake near Silver Lake	Kosciusko	3.59	40	865.74	670	+	1947-53
03331280	McClures Lake near Silver Lake	Kosciusko	1.29	32	865.85	410	+	1945-52
03331300	Hill Lake near Silver Lake	Kosciusko	0.85	67	871.50	1,300	+	1952-
03331320	Diamond Lake near Silver Lake	Kosciusko	3.92	79	--------	1,280	+	1954-
03331340	Yellow Creek Lake near Silver Lake	Kosciusko	11.1	151	860.50	4,730	+	1945-53
03331360	Rock Lake near Akron	Kosciusko	2.74	56	847.29	360	+	1946-66
03331370	Town Lake near Akron	Fulton	2.77	23	--------	220	+	1949-50
03331380	Lake Manitou at Rochester	Fulton	44.2	1,158	778.41	10,165	+	1943-
03331390	Zink Lake near Rochester	Fulton	[8].11	19	810.68	------	-	1952-55
03331400	Nyona Lake near Greenoak	Fulton	7.59	104	793.91	1,340	+	1946-
03331420	South Mud Lake near Fulton	Fulton	4.53	94	793.42	1,020	+	1946-66
03331438	King Lake near Delong	Fulton	1.98	18	--------	180	+	1971-
03331440	Maxinkuckee Lake at Culver	Marshall	13.7	1,864	733.12	45,600	+	1943-
03331460	Lost Lake near Culver[4]	Marshall	14.2	40	732.00	------	-	1954-
03331480	Langenbaum Lake near Monterey	Starke	.72	48	717.96	260	+	1954-66
03331700	Bruce Lake at Bruce Lake	Pulaski	6.38	245	723.69	1,790	+	1943-53
03332200	Fletcher Lake at Fletcher	Fulton	.67	45	783.20	880	+	1946-53
03370900	Starve Hollow Lake near Vallonia	Jackson	6.67	145	--------	980	+	1946-61, 1963-71
03371700	Ogle Lake near Nashville	Brown	1.03	20	--------	250	+	1954-

Lakes in the St. Lawrence River basin for which records are available

	Lake	County	Drainage (square mile)	Surface Area (acres)	Established Levelxx	Capacity (acre feet)	Contour Map available	Records available
	STREAMS TRIBUTARY TO LAKE MICHIGAN							
04092500	Wolf Lake at Hammond[9]	Lake	5.72	999	--------	------	-	1946-49
04092990	Lake George at Hobart	Lake	124	282	602.23	------	-	1946-
04097520	Lake Pleasant near Nevada Mills	Steuben	3.18	424	--------	3,490	+	1954-69, 1971- 1976-
04097550	Lake George at Jamestown	Steuben	[8]14.7	488	985.28	------	-	1946-
04097596	Marsh Lake near Fremont	Steuben	14.9	------	--------	------	-	1967-69
04097600	Little Otter Lake near Fremont	Steuben	15.7	34	965.18	740	+	1946-53
04097640	Big Otter Lake near Fremont	Steuben	21.3	69	965.18	1,780	+	1946-53
04097650	Snow Lake at Lake James	Steuben	[8]40.2	310	964.96	7,998	+	1343-49
04097660	Lake James at Lake James	Steuben	[8]47.8	1,034	964.96	33,585	+	1943-49
04097680	Jimmerson Lake at Nevada Mills[5]	Steuben	[8]51.6	434	964.66	4,394	+	1946-
04097780	Loon Lake near Angola	Steuben	2.13	138	1,011.98	630	+	1954-66
04097850	Crooked Lake at Crooked Lake	Steuben	10.4	828	988.17	10,555	+	1946-
04097950	Lake Gage at Panama	Steuben	[8]17.3	332	954.25	10,140	+	1946-
04097960	Lime Lake at Panama	Steuben	[8]17.5	57	954.25	427	+	1946-
04098100	Wall Lake near Orland	Lagrange	1.61	141	942.25	1,640	+	1953-54
04098110	Mud Lake near Orland	Steuben	1.85	25	939.01	------	-	1956-67
04098300	Cedar Lake near Ontario	Lagrange	1.60	120	871.90	1,020	+	1948-51
04099050	Pigeon Lake near Angola	Steuben	[8]35.2	61	988.24	930	+	1954-63
04099100	Fox Lake near Angola	Steuben	[8]1.25	142	1,018.83	3,150	+	1946-53
04099190	Pleasant Lake at Pleasant Lake	Steuben	[8]1.12	53	963.52	1,130	+	1946-66
04099200	Long Lake at Moonlight	Steuben	[8]67.9	92	--------	1,540	+	1946-
04099250	Bower Lake near Pleasant Lake	Steuben	[8]84.6	25	948.50	280	+	1946-71, 1976-
04099260	Golden Lake near Pleasant Lake	Steuben	[8]88.8	119	948.50	1,810	+	1946-71, 1976-
04099400	Silver Lake near Angola	Steuben	[8]3.79	238	959.40	2,540	+	1945-53
04099430	Bass Lake near Angola	Steuben	[8].39	61	979.68	450	+	1954-66
04099440	Howard Lake near Angola	Steuben	[8]3.90	27	977.34	130	+	1954-63
04099500	Hogback Lake near Angola	Steuben	[8]103	146	948.50	1,450	+	1946-
04099520	Otter Lake near Flint	Steuben	[8]6.91	118	934.15	1,960	+	1954-66
04099540	Story Lake near Hudson	DeKalb	3.16	77	942.20	1,020	+	1946, 1954-66
04099560	Big Turkey Lake at Stroh	Lagrange	35.8	450	926.61	7,300	+	1945-66
04099575	McClish Lake near Helmer	Lagrange	1.28	35	951.09	1,210	+	1951-74, 1976-
04099580	Lake of the Woods near Helmer	Lagrange	5.25	136	951.09	5,470	+	1951-74, 1976-
04099600	Big Long Lake near Stroh	Lagrange	4.77	388	956.2	------	-	1954-
04099620	Pretty Lake near Stroh	Lagrange	2.89	184	965.50	4,720	+	1949-53, 1963-65
04099640	Little Turkey Lake at Elmira	Lagrange	56.5	135	925.72	1,550	+	1945-66
04099660	Royer Lake near Plato	Lagrange	4.69	69	936.50	1,630	+	1952-
04099670	Fish Lake near Plato	Lagrange	[8]10.6	100	936.50	4,050	+	1945-
04099700	North Twin Lake near Howe	Lagrange	1.54	135	843.56	2,120	+	1953-
04099710	South Twin Lake near Howe	Lagrange	2.22	116	843.56	3,600	+	1953-70
04099740	Shipshewana Lake near Shipshewana	Lagrange	[8]6.74	202	852.04	1,350	+	1951-
04099760	Fish Lake near Scott	Lagrange	[8]6.21	139	814.42	2,560	+	1954-73, 1976-

Lakes in the St. Lawrence River basin for which records are available--Continued

STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued

	Lake	County	Drainage (square mile)	Surface Area (acres)	Established Levelxx	Capacity (acre feet)	Contour Map available	Records available
04099780	Stone Lake near Scott	Lagrange	1.51	152	818.76	2,060	+	1954-73, 1976-
04099800	Emma Lake near Emma	Lagrange	13.6	42	880.87	700	+	1954-66
04099810	Cass Lake near Shipshewana	Lagrange	.68	39	--------	873	+	1970-
04099820	Hunter Lake near Middlebury	Elkhart	.51	99	856.90	1,120	+	1946-53
04099840	Wolf Lake near Goshen	Elkhart	[8]1.29	100	813.00	------	-	1947-57
04099860	Heaton Lake near Elkhart	Elkhart	9.33	87	767.30	640	+	1946-53, 1969-74, 1976-
04099880	Simonton Lake near Elkhart	Elkhart	7.44	303	772.19	1,560	+	1946-
04099950	Indiana Lake near Bristol	Elkhart	.62	122	759.73	3,400	+	1946-53
04100010	Cree Lake near Kendallville	Noble	4.85	58	945.23	910	+	1949-66
04100020	Blackman Lake near Wolcottville	Lagrange	.98	67	974.20	1,210	+	1953-59
04100030	Adams Lake near Wolcottville	Lagrange	5.62	308	953.59	7,690	+	1946-
04100040	Atwood Lake near Wolcottville	Lagrange	1.23	170	899.99	1,560	+	1948-53
04100050	Witmer Laker near Wolcottville	Lagrange	36.1	204	897.36	7,040	+	1945-
04100060	Westler Lake near Wolcottville	Lagrange	37.8	88	897.36	1,770	+	1945-
04100070	Dallas Lake near Wolcottville	Lagrange	39.8	283	897.36	9,970	+	1945-
04100080	Martin Lake near Valentine	Lagrange	4.93	26	899.45	890	+	1945-
04100090	Olin Lake neaqr Valentine	Lagrange	5.81	103	899.45	9,180	+	1945-
04100100	Oliver Lake near Valentine	Lagrange	11.1	362	899.45	15,358	+	1945-
04100110	Hackenburg Lake near Wolcottville	Lagrange	55.4	42	897.36	510	+	1945-
04100120	Messick Lake near Wolcottville	Lagrange	56.4	68	897.36	1,450	+	1945-
04100130	Jones Lake near Cosperville[6]	Noble	70.3	114	885.55	960	+	1948-
04100140	Bixler Lake at Kendallville	Noble	5.28	120	963.65	2,090	+	1945-
04100150	Round Lake at Kendallville	Noble	3.47	99	954.50	2,140	+	1954-
04100160	Little Long Lake at Kendallville	Noble	4.55	71	954.50	1,750	+	1954-
04100170	Latta Lake near Rome City	Noble	2.52	42	918.71	900	+	1954-66
04100180	Sylvan Lake at Rome City	Noble	33.8	669	916.20	5,986	+	1943-
04100190	Sacarider Lake near Kendallville	Noble	1.43	33	--------	740	+	1954-63
04100200	Tamarack Lake near Cosperville	Noble	15.9	50	885.55	880	+	1948-
04100210	Steinbarger Lake near Cosperville	Noble	24.3	73	885.55	1,590	+	1948-
04100220	Waldron Lake near Cosperville	Noble	134	216	885.55	3,120	+	1948-
04100230	Long Lake near Burr Oak	Noble	12.0	40	895.82	630	+	1954-71
04100240	Sand Lake near Burr Oak	Noble	14.9	47	893.56	1,270	+	1946-51
04100250	Rivir Lake near Burr Oak	Noble	18.6	24	--------	380	+	1954-65
04100258	High Lake near Wolflake	Noble	4.43	123	896.35	1,240	+	1961-
04100260	Bear Lake near Wolflake	Noble	6.98	136	894.60	3,030	+	1943-
04100280	Muncie Lake near Burr Oak	Noble	42.8	47	--------	580	+	1954-
04100290	Silver Lake near Wolflake	Noble	.28	34	--------	220	+	1953-63
04100300	Skinner Lake near Albion	Noble	14.0	125	927.74	1,750	+	1945-72, 1977-
04100310	Pleasant Lake near Wolflake	Noble	.29	20	--------	540	+	1952-53
04100320	Upper Long Lake near Wolflake	Noble	2.08	86	891.19	1,900	+	1956-
04100330	Lower Long Lake near Albion	Noble	4.35	66	889.81	1,560	+	1946-52
04100340	Eagle Lake near Kimmel	Noble	3.22	81	--------	1,050	+	1946-48
04100350	Diamond Lake near Wawaka	Noble	4.80	105	--------	2,580	+	1946-
04100360	Sparta Lake at Kimmel	Noble	.69	31	888.50	170	+	1946-51
04100370	Engle Lake near Ligonier	Noble	[8]4.19	48	--------	670	+	1956-71, 1977-
04100380	Harper Lake near Washington Center	Noble	2.76	11	878.25	160	+	1946-
04100390	Knapp Lake near Washington Center	Noble	6.02	88	878.25	3,040	+	1946-
04100400	Moss Lake near Washington Center	Noble	6.12	9	878.25	80	+	1946-
04100410	Hindman Lake near Washington Center	Noble	8.66	13	878.25	140	+	1946-
04100420	Gordy Lake near Cromwell	Noble	9.40	31	876.68	680	+	1953-66
04100425	Rider Lake near Cromwell	Noble	10.9	5	876.68	30	+	1953-66
04100430	Duely Lake near Cromwell[7]	Noble	11.2	21	876.68	180	+	1953-66
04100440	Village Lake near Cromwell	Noble	12.0	12	876.68	160	+	1953-66
04100446	Platbelly Lake near Syracuse	Kosciusko	4.66	326	--------	------	-	1964-69
04100448	Papakeechie Lake near Syracuse	Kosciusko	5.52	300	--------	------		1964-69
04100450	Wawasee Lake at Wawasee	Kosciusko	36.9	3,060	858.89	67,210	+	1943-66
04100460	Syracuse Lake at Syracuse	Kosciusko	38.2	414	858.87	5,360	+	1943-
04100470	Dewart Lake near Leesburg	Kosciusko	[8]8.05	551	867.70	9,000	+	1945-
04100480	Wabee Lake near Milford	Kosciusko	[8]14.6	187	829.79	4,750	+	1946-53

STREAMS TRIBUTARY TO LAKE ERIE

	Lake	County	Drainage (square mile)	Surface Area (acres)	Established Levelxx	Capacity (acre feet)	Contour Map available	Records available
04177200	Clear Lake at Clear Lake	Steuben	6.86	800	1,037.38	24,990	+	1943-
04177210	Round Lake at Clear Lake	Steuben	7.25	30	1,037.38	340	+	1943-
04177300	Long Lake near Ray	Steuben	2.80	154	--------	1,840	+	1961-63
04177680	Ball Lake near Hamilton	Steuben	11.6	87	894.76	3,520	+	1961-
04177700	Hamilton Lake at Hamilton	Steuben	16.5	802	898.83	16,600	+	1943-
04179200	Indian Lake near Corunna	DeKalb	3.76	56	--------	1,220	+	1957
04179300	Cedar lake near Waterloo	DeKalb	23.4	28	896.76	230	+	1943-56

Lakes in the Upper Mississippi River basin for which records are avaliable

ILLINOIS RIVER BASIN

	Lake	County	Drainage (square mile)	Surface Area (acres)	Established Levelxx	Capacity (acre feet)	Contour Map available	Records available
05514740	Saugany Lake near Rolling Prairie	LaPorte	[8]2.34	74	781.21	2,190	+	1946-50
05514741	Hudson Lake at Hudson Lake	LaPorte	7.92	432	763.09	5,060	+	1946-

Lakes in the Upper Mississippi River basin for which records are available--Continued

	Lake	County	Drainage (square mile)	Surface Area (acres)	Established Levelxx	Capacity (acre feet)	Contour Map available	Records available
	ILLINOIS RIVER BASIN--Continued							
05514750	North Chain Lake at Lydick	St. Joseph	[8]3.89	88	721.17	1,400	+	1946-53
05514760	South Chain Lake at Westfield	St. Joseph	[8]6.32	90	717.04	270	-	1946-53
05514770	Wharton Lake near South Bend	St. Joseph	[8]1.85	-----	--------	------	-	1960-
05514900	Silver Lake near Rolling Prairie	LaPorte	1.72	54	795.20	------	-	1946-66
05515200	Upper Fish Lake near Stillwell	LaPorte	[8]9.65	139	688.22	1,040	+	1946-53
05515210	Lower Fish Lake near Stillwell	LaPorte	[8]10.4	134	688.22	870	+	1946-53
05515220	Pine Lake at LaPorte	LaPorte	[8]10.7	564	796.20	------	-	1946-75 1980-
05515230	Stone Lake at LaPorte	LaPorte	[8]10.7	140	796.20	------	-	1946-75 1980-
05515240	Clear Lake at LaPorte	LaPorte	.65	106	798.20	760	+	1942-49, 1952-75 1980-
05515600	Koontz Lake at Koontz Lake	Starke	[8]6.25	346	714.56	3,170	+	1943-
05515800	Riddles Lake near Lakeville	St. Joseph	[8]11.7	77	817.50	640	+	1946-73, 1976-
05516200	Lake of the Woods near Bremen	Marshall	[8]9.45	416	803.85	6,810	+	1945-
05516600	Pretty Lake near Plymouth	Marshall	.85	97	787.36	2,140	+	1954-66
05516700	Myers Lake near Twin Lakes	Marshall	1.41	96	768.69	2,000	+	1945-53
05516800	Mill Pond and Kreighbaum Lake near Twin Lakes	Marshall	[8]5.34	168	767.75	1,020	+	1945-53
05516900	Eagle Lake near Ober	Starke	[8]25.5	24	713.25	160	+	1946-53
05517100	Skits Lake near Knox	Starke	------	1,000	--------	------	-	1949-53
05517200	Bass Lake at Bass Lake	Starke	5.18	1,400	713.65	------	-	1943-
05517600	Wauhob Lake near Valparaiso	Porter	.40	21	--------	------	-	1946-
05517650	Long Lake near Valparaiso	Porter	1.31	65	797.66	520	+	1947-52
05517670	Spectacle Lake near Valparaiso	Porter	.53	62	812.82	540	+	1946-53
05517700	Flint Lake near Valparaiso	Porter	2.62	86	797.66	------	-	1946-
05517800	Lake Eliza near Beatrice	Porter	1.70	45	738.70	------	-	1954-74, 1976-
05518700	Cedar Lake at Cedar Lake	Lake	8.14	781	--------	6,750	+	1943-
05518800	Dalecarlia Lake near Creston	Lake	20.1	193	--------	------	-	1947-52
05521300	Ringneck Lake near McCaryville	Jasper	1.94	1,400	--------	------	-	1949-55
05525700	J.C. Murphy Lake near Morocco	Newton	13.0	1,515	--------	------	-	1952-61

+Depth contour maps available for sale by Indiana Department of Natural Resources, State Office Building, Indianapolis, Indiana.

xxElevation, in feet, above mean sea level.

[1] Formerly published as Rider Lake at Wilmot.

[2] Formerly published as Chapman Lake near Warsaw.

[3] Formerly published as Johnson Lake near Pierceton.

[4] Formerly published as Hawks Lake near Culver.

[5] Formerly published as Jimerson Lake at Nevada Mills.

[6] Formerly published as Sanford Lake near Cooperville.

[7] Formerly published as Duley Lake near Cromwell, and Druely Lake near Cromwell, and Druley Lake near Cromwell.

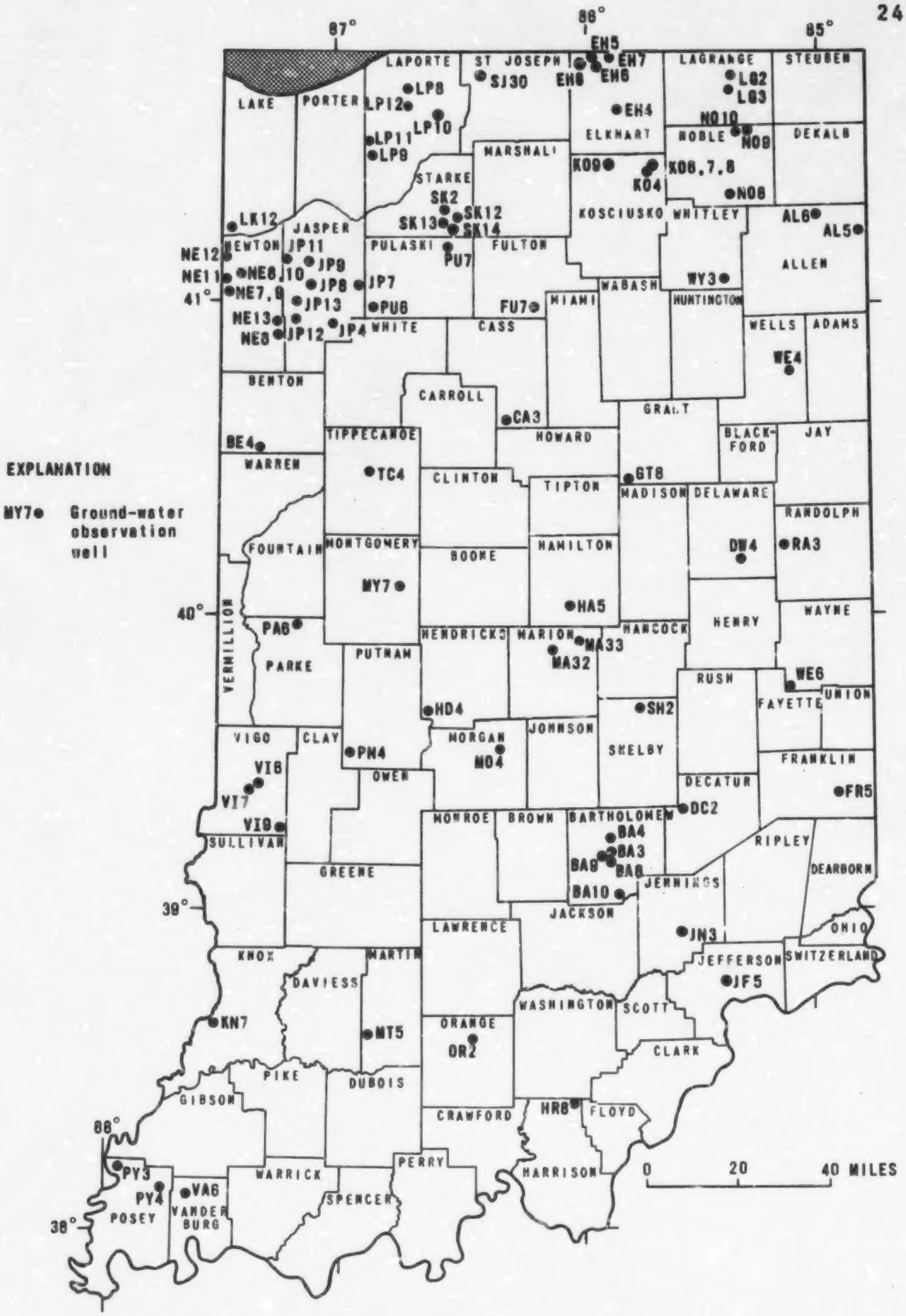
[8] Contains drainage area (5 percent or greater) that does not contribute directly to surface-water runoff.

[9] Same as Wolf Lake at Chicago, Illinois WRD District.

OTHER LAKE MAPS AVAILABLE

The lakes in Indiana which are not included in the cooperative stabilization program but which have been mapped for recreational purposes are shown in the following table. Surface area and capacities are related to reference mean sea level elevation at time of mapping. Additional data is shown on map which are available for sale by the Indiana Department of Natural Resources, State Office Building, Indianapolis, Indiana.

Lake	County	Surface Area (acres)	Capacity (acre-feet)	Lake	County	Surface Area (acres)	Capacity (acre-feet)
OHIO RIVER BASIN							
Barr Lake	Fulton	22	470	Lake 16	Fulton	27	220
Bischoff Reservoir	Ripley	200	1,920	Larwill Lake	Whitley	9	170
Black Lake	Whitley	24	400	Lenape Lake	Greene	36	330
Bowen Lake	Scott	7	60	Lincoln Park Lake	Spencer	58	520
Brown Lake	Whitley	23	580	Little Pike Lake	Kosciusko	25	140
Caldwell Lake	Kosciusko	45	800	McColley Lake	Wabash	28	410
Crane Lake	Noble	28	360	Round Lake	Wabash	48	540
Crosley Lake	Jennings	14	130	Scales Lake	Warrick	66	520
Ferdinand Lake	Dubois	42	440	Schlamm Lake	Clark	19	170
Franke Lake	Clark	9	70	Sellers Lake	Kosciusko	32	340
Hartz Lake	Starke	28	370	Shakamak Lake	Sullivan	56	610
Kunkel Lake	Wells	25	150	Twin Lakes	Wabash	18	190
Lake Freeman	Carroll	1,547	26,000	Whitewater Lake	Union	199	3,650
Lake Shafer	White	1,291	13,120	Yellowwood Lake	Brown	133	1,890
STREAMS TRIBUTARY TO LAKE MICHIGAN							
Appleman Lake	Lagrange	52	590	Mateer Lake	Lagrange	18	150
Bartley Lake	Noble	34	430	Miller Lake	Noble	11	160
Barton Lake	Steuben	94	1,340	Millers Lake	Noble	28	410
Bell Lake	Steuben	38	510	Mud Lake	Noble	8	70
Boner Lake	Kosciusko	40	370	Norman Lake	Noble	14	280
Bowen Lake	Noble	30	1,080	Pigeon Lake	Lagrange	61	1,160
Bristol Lake	Noble	27	740	Port Mitchell Lake	Noble	15	180
Buck Lake	Lagrange	18	150	Rainbow Lake	Lagrange	16	250
Center Lake	Steuben	46	390	Schockopee Lake	Noble	21	280
Cline Lake	Lagrange	20	350	Shock Lake	Kosciusko	37	1,210
Deer Lake	Noble	36	420	Smith Hole	Lagrange	2	10
Dock Lake	Noble	16	230	Still Lake	Lagrange	30	620
Eve Lake	Lagrange	31	670	Sweet Lake	Noble	16	210
Fish Lake	Steuben	59	750	Tamarack Lake	Noble	84	1,340
Hog Lake	LaPorte	59	690	Walters Lake	Steuben	53	550
Hog Lake	Steuben	48	570	Weir Lake	Lagrange	6	70
Lime Lake	Steuben	30	330	Wible Lake	Noble	49	650
Little Turkey Lake	Steuben	58	780	Williams Lake	Noble	46	1,070
Marl Lake	Noble	30	510	Wyland Lake	Kosciusko	6	100
STREAMS TRIBUTARY TO LAKE ERIE							
Dunton Lake	DeKalb	21	340	Mirror Lake	Steuben	9	120
Handy Lake	Steuben	16	290	Terry Lake	DeKalb	17	160
Lake Anne	Steuben	17	280				
UPPER MISSISSIPPI RIVER BASIN							
Cook Lake	Marshall	93	1,650	Gilbert Lake	Marshall	37	490
Dixon Lake	Marshall	33	480	Holem Lake	Marshall	40	390
Flat Lake	Marshall	26	210	Lawrence Lake	Marshall	69	1,580


EXPLANATION
MY7● Ground-water observation well
87°
86°
85°
41°
40°
39°
38°
88°
LAKE
PORTER
LAPORTE
ST JOSEPH
ELKHART
LAGRANGE
STEUBEN
NOBLE
DEKALB
MARSHALL
STARKE
KOSCIUSKO
WHITLEY
ALLEN
JASPER
NEWTON
PULASKI
FULTON
WABASH
HUNTINGTON
MIAMI
WHITE
CASS
WELLS
ADAMS
BENTON
CARROLL
GRANT
BLACKFORD
JAY
HOWARD
TIPPECANOE
WARREN
CLINTON
TIPTON
MADISON
DELAWARE
RANDOLPH
FOUNTAIN
MONTGOMERY
BOONE
HAMILTON
HENRY
WAYNE
VERMILLION
PARKE
PUTNAM
HENDRICKS
MARION
HANCOCK
RUSH
FAYETTE
UNION
VIGO
CLAY
MORGAN
JOHNSON
SHELBY
FRANKLIN
OWEN
DECATUR
MONROE
BROWN
BARTHOLOMEW
SULLIVAN
GREENE
RIPLEY
DEARBORN
JENNINGS
JACKSON
LAWRENCE
OHIO
KNOX
MARTIN
JEFFERSON
SWITZERLAND
DAVIESS
WASHINGTON
SCOTT
ORANGE
CLARK
PIKE
DUBOIS
GIBSON
CRAWFORD
FLOYD
HARRISON
WARRICK
PERRY
SPENCER
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VANDERBURG
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NE7,9
NE13
NE6
PU7
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WY3
FU7
WE4
CA3
BE4
TC4
GT8
DW4
RA3
MY7
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JN3
JF5
KN7
MT5
OR2
HR8
PY3
PY4
VA6
0
20
40 MILES

Figure 6.-- Location of ground-water observation wells.

ALLEN COUNTY

410426084495201. Local number, AL 5.

LOCATION.--Lat 41°04'26", long 84°49'52", in NW¼NE¼SE¼ sec.9, T.30 N., R.15 E., Allen County, Hydrologic Unit 04100005, 1.3 mi west of Edgerton.
Owner: Noel Gerig.

AQUIFER.--Limestone of Salina Formation of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 4 in, depth 97 ft, cased to 40 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 760 ft. Measuring point: Top of floor of shelter 0.17 ft above land-surface datum.

REMARKS.--Water level affected by nearby quarry operations.

PERIOD OF RECORD.--July 1962 to December 1971. January 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.04 ft below land-surface datum, July 8, 9, 1962; lowest, 38.41 ft below land-surface datum, May 4, 1967.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	28.14	27.68	27.43				---	26.37	26.26	26.09	26.12	26.38
10	28.59	27.23	---				26.79	26.42	26.29	26.10	26.05	26.11
15	27.86	27.31	---				26.29	26.72	26.49	26.19	26.23	26.26
20	27.90	27.08	---				26.70	26.33	26.29	26.36	26.20	26.08
25	27.73	27.55	---				26.37	26.17	26.21	26.39	26.37	26.05
EOM	27.92	27.64	---				26.09	26.36	26.25	26.28	26.21	26.33
LOW	28.88	28.14	27.92				27.27	27.25	26.82	26.79	26.61	26.85
HIGH	27.46	27.08	27.12				26.09	26.07	26.00	26.08	25.91	26.05

WTR YR 1984 HIGH 25.91 AUG 8 LOW 28.88 OCT 7

ALLEN COUNTY

410932084561101. Local number, AL 6.

LOCATION.--Lat 41°09'32", long 84°56'11", in SW¼SW¼NE¼ sec.10, T.31 N., R.14 E., Allen County, Hydrologic Unit 04100005, at the intersection of Ehle and Thimler Roads, 10 mi northeast of New Haven.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 84 ft, cased to 81.5 ft, screened to 83.5 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 760 ft. Measuring point: Top of floor of shelter 2.50 ft above land-surface datum.

REMARKS.--Water level affected by pumpage.

PERIOD OF RECORD.--December 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.33 ft below land-surface datum, May 3, 1983; lowest, 14.77 ft below land-surface datum, Oct. 29, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.26	14.17	12.27					9.60	9.62	11.45	12.48	13.55
10	14.36	14.14						10.06	10.08	11.63	12.70	13.47
15	14.32	13.96						10.44	10.52	11.91	12.91	13.66
20	14.33	13.46						10.05	10.83	12.12	13.12	13.75
25	14.15	13.27						9.28	11.06	12.34	13.25	13.77
EOM	14.22	12.69						9.03	11.28	12.46	13.53	13.81
LOW	14.56	14.40	12.67					10.72	11.47	12.63	13.72	14.00
HIGH	14.14	12.69	11.49					8.97	9.11	11.31	12.48	13.47

WTR YR 1984 HIGH 8.97 MAY 30 LOW 14.56 OCT.9

BARTHOLOMEW COUNTY

391320085534601. Local number, BA 3.

LOCATION.--Lat 39°13'20", long 85°53'46", in NE¼NE¼SE¼ sec.18, T.9 N., R.6 E., Bartholomew County, Hydrologic Unit 05120205, in northeast corner of Lincoln Park in the city of Columbus.
Owner: City of Columbus.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 123 ft, cased to 116 ft, screened to 121 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 639.8 ft. Measuring point: Top of floor of shelter 2.50 ft above land-surface datum.

REMARKS.--Water level affected by pumpage for water and sewage utilities.

PERIOD OF RECORD.--January 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.75 ft below land-surface datum, Feb. 24, 25, 1975; lowest, 28.74 ft below land-surface datum, Oct. 9, 1971.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.18	21.72	22.20	19.15	19.18	19.30	18.26	18.09	18.86	19.32	19.57	19.72
10	20.06	22.32	20.53	19.27	19.41	19.27	18.37	18.21	18.91	19.38	19.96	19.61
15	19.96	22.19	19.37	19.28	19.42	19.35	18.33	18.47	19.51	19.46	19.99	19.95
20	19.84	22.77	19.25	19.34	19.33	18.82	18.50	18.55	19.43	19.95	19.70	19.86
25	19.39	22.37	19.16	19.14	19.47	18.70	17.82	18.52	19.16	19.89	19.90	19.61
EOM	19.48	22.32	19.19	19.27	19.46	18.81	17.87	18.78	19.56	19.63	19.91	19.53
LOW	20.98	22.95	22.99	19.74	20.12	19.75	19.08	19.41	20.39	20.58	20.71	20.50
HIGH	19.38	19.55	19.13	19.11	19.18	18.70	17.64	18.02	18.71	19.18	19.53	19.53

WTR YR 1984 HIGH 17.64 APR 23 LOW 22.99 DEC 3

BARTHOLOMEW COUNTY

391627085534401. Local number, BA 4.

LOCATION.--Lat 39°16'27", long 85°53'44", in NE¼NE¼NE¼ sec.31, T.10 N., R.6 E., Bartholomew County, Hydrologic Unit 05120205, by a cemetery on the north side of Bakalar AFB at the northern city limits of Columbus.
Owner: Bartholomew County.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 93 ft, cased to 85 ft, screened to 90 ft.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 654.04 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.60 ft above land-surface datum.

PERIOD OF RECORD.--January 1965 to current year.

REVISED RECORDS.--WDR IN-80-1: 1979.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.25 ft below land-surface datum, Mar. 23, 1979; lowest, 21.15 ft below land-surface datum, Feb. 11, 12, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.74	19.09	18.39	17.13	17.49	17.67	16.62	14.91	15.42	16.28	17.14	17.94
10	18.85	19.12	18.10	17.20	17.56	17.73	16.19	14.87	15.54	16.44	17.26	18.05
15	18.95	19.13	17.87	17.27	17.56	17.73	15.79	14.98	15.69	16.57	17.40	18.18
20	19.03	19.04	17.64	17.39	17.57	17.64	15.68	15.06	15.84	16.71	17.54	18.30
25	19.05	18.93	17.39	17.46	17.60	17.43	15.48	15.18	15.99	16.85	17.66	18.41
EOM	19.06	18.72	17.21	17.51	17.64	16.97	15.14	15.32	16.14	17.01	17.81	18.50
LOW	19.06	19.14	18.70	17.52	17.65	17.77	16.97	15.33	16.17	17.04	17.84	18.52
HIGH	18.66	18.72	17.21	17.13	17.48	16.97	15.14	14.87	15.34	16.17	17.04	17.84

WTR YR 1984 HIGH 14.87 MAY 8-11 LOW 19.14 NOV 11-14

BARTHOLOMEW COUNTY

390950085553501. Local number, BA 8.

LOCATION.--Lat 39°09'50", long 85°55'35", in NE¼NW¼SW¼ sec.1, T.8 N., R.5 E., Bartholomew County, Hydrologic Unit 05120206, on property of Meadows Metal Products Co., 4 mi south of Columbus.
Owner: Meadows Metal Products Co., Inc.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 49 ft, casing length unknown.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 615.48 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 3.00 ft above land-surface datum.

PERIOD OF RECORD.--February 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.06 ft below land-surface datum, June 3, 1968; lowest, 23.17 ft below land-surface datum, Nov. 30, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.21	20.52	19.12	17.25	18.17	18.20	16.30	13.52	14.11	15.93	17.50	18.80
10	20.36	20.51	18.58	17.44	18.30	18.10	15.84	13.49	14.33	16.20	17.73	18.97
15	20.49	20.47	18.25	17.61	18.33	17.99	15.40	13.70	14.63	16.47	-----	19.29
20	20.57	20.38	17.73	17.79	18.24	17.77	15.31	13.87	14.97	16.75	-----	19.44
25	20.51	20.20	17.35	17.94	18.22	17.36	14.73	13.82	15.31	17.01	-----	19.55
EOM	20.52	19.75	17.23	18.07	18.20	16.71	13.82	13.95	15.65	17.26	18.60	19.71
LOW	20.64	20.52	19.72	18.09	18.36	18.24	16.71	14.04	15.71	17.31	18.64	19.75
HIGH	20.10	19.75	17.20	17.23	18.09	16.71	13.82	13.47	13.96	15.72	17.32	18.64

WTR YR 1984 HIGH 13.47 MAY 9 LOW 20.64 OCT 20

BARTHOLOMEW COUNTY

391035085560401. Local number, BA 9.

LOCATION.--Lat 39°10'35", long 85°56'04", in SW¼NE¼SW¼ sec.35, T.9 N., R.5 E., Bartholomew County, Hydrologic Unit 05120206, at the Bartholomew County Home on the 4-H Fairgrounds, 3.0 mi south of Columbus.
Owner: City of Columbus.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 115 ft, cased to 106 ft, screened to 111 ft.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 621.58 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 1.65 ft above land-surface datum.

REMARKS.--Water level affected by pumpage from municipal supply well field.

PERIOD OF RECORD.--April 1970 to current year.

REVISED RECORDS.--WDR IN-80-1: 1979.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.75 ft below land-surface datum, Apr. 27-30, 1973; lowest, 38.75 ft below land-surface datum, Sept. 15, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.76	29.70	25.94	27.43	28.25	28.70	27.13	24.18		---	28.28	29.53
10	31.05	28.81	26.50	27.54	28.64	28.45	26.44	24.07		---	28.33	29.85
15	30.81	28.18	27.23	27.75	28.62	28.58	26.22	24.20		---	28.87	30.15
20	31.32	27.67	27.20	28.05	28.32	28.56	26.26	24.51		27.36	28.79	30.24
25	31.24	27.18	27.18	28.45	28.61	28.12	25.37	23.96		28.27	28.74	30.16
EOM	31.30	26.58	27.19	28.40	28.47	27.81	24.66	---		27.77	29.10	30.05
LOW	33.03	33.04	28.83	30.05	30.20	30.19	29.12	25.88		29.08	30.33	31.72
HIGH	30.42	26.58	25.79	27.05	28.16	27.65	24.66	23.96		27.36	27.76	29.09

WTR YR 1984 HIGH 23.96 MAY 25 LOW 33.04 NOV 1

BARTHOLOMEW COUNTY

390317085523701. Local number, BA 10.

LOCATION.--Lat 39°03'17", long 85°52'37", in NE¼NE¼NE¼ sec.16, T.7 N., R.6 E., Bartholomew County, Hydrologic Unit 05120207, 0.8 mi east of U.S. Highway 31A and 1,0 mi southeast of Jonesville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 85 ft, cased to 80 ft, screened to 85 ft, Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 580 ft, Measuring point: Top of floor of shelter 3.50 ft above land-surface datum.

PERIOD OF RECORD.--October 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0,67 ft below land-surface datum, Apr. 14, 1979; lowest, 11.85 ft below land-surface datum, Nov. 12, 1982.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.21	9.64	6.93	7.64	8.27	8.08	3.95	5.85	7.63	8.41	9.47	10,33
10	11.34	9.77	7.19	8,02	8,58	7.63	5,35	6.23	7.96	8.42	9.58	10,41
15	11.36	9.40	4.12	8.26	7.99	7.59	6.18	6.74	8.28	8.74	9.75	10,61
20	11.10	9.08	6.06	8.59	8.05	4.76	6.47	7.13	8.52	9.03	9.91	10,63
25	9.35	8.23	6.79	8.63	8.24	4.77	2.70	6.93	8.64	9.24	10.01	10,63
EOM	9.48	6.96	7.27	8.69	8,16	5.88	5,24	7.29	8.88	9.31	10.22	10,53
LOW	11.52	9.89	7.43	8.87	8,87	8.38	6.57	7.43	9.00	9.41	10.30	10,88
HIGH	9.28	6.96	4.04	7.34	7.93	4.27	2.70	5.58	7.35	8.33	9.39	10,22

WTR YR 1984 HIGH 2.70 APR 24, 25 LOW 11.52 OCT 19

BENTON COUNTY

402851087213501. LOCAL NUMBER, BE 4.

LOCATION.--Lat 40°28'51", long 87°21'35", in SE¼NE¼SE¼ sec.31, T.24 N., R.8 W., Benton County, Hydrologic Unit 05120108, on north side of county road, 3.6 mi southeast of Boswell.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 310 ft, cased to 300 ft, screened to 305 ft. Instrumentation: Water-stage recorder.

DATUM.--Altitude of land surface is 710 ft. Measuring point: Top of floor of shelter 2.15 ft above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10,65 ft below land-surface datum, May 7, 1982; lowest, 16.11 ft below land-surface datum, Feb. 13, 1981.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.56	15.08	15.05	14.25	13.92	13.37	12.33	11.59	11.23	11.53	12,58	
10	14.86	14.93	15.14	14.32	14.04	13.37	12.34	11.59	11.19	11.72	12,73	
15	---	15.02	14.80	14.34	14.01	13.19	12.01	11.72	11.29	11.90	---	
20	---	14.93	14.99	14.29	13.77	12.94	12.05	11.45	11.30	---	---	
25	---	15.14	14.77	14.10	13.60	12.83	11.81	11.31	11.35	---	---	
EOM	15.08	15.15	14.67	14.08	13.47	12.71	11.66	11.37	11.47	12.46	---	
LOW	15.13	15.24	15.28	14.69	14.24	13.55	12.72	11.84	11.51	12.47	12,94	
HIGH	14.55	14.93	14,52	13.93	13.44	12.57	11.66	11.30	11.17	11.51	12,46	

WTR YR 1984 HIGH 11.17 JUN 8 LOW 15.28 DEC 1, 2

CASS COUNTY

403407086175701. Local number, CS 3.

LOCATION.--Lat 40°34'07", long 86°17'57", in NE¼NE¼SE¼ sec.33, T.25 N., R.2 E., Cass County, Hydrologic Unit 05120105, at intersection of State Highway 18 and County Road 400 East, 2.5 mi east of Young America.
Owner: U.S. Geological Survey.

AQUIFER.--Dolomitic Limestone of Devonian-Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 130 ft, cased to 78 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Datum is 781.74 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.65 ft above land-surface datum.

PERIOD OF RECORD.--August 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.85 ft below land-surface datum, Feb. 2, 1968; lowest, 7.95 ft below land-surface datum, Feb. 11, 15, 16, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.26	7.54	6.92	5.68	5.86	5.33	4.95	5.25	5.30	5.82	6.16	6.41
10	7.52	7.29	6.78	5.94	5.90	5.45	5.23	5.36	5.52	5.82	6.27	6.22
15	7.49	7.28	6.12	5.95	5.58	5.31	5.06	5.61	5.70	5.95	6.28	6.49
20	7.52	7.06	6.07	6.02	5.65	4.95	5.25	5.26	5.77	5.99	6.24	6.37
25	7.43	7.31	5.89	5.89	5.52	4.90	5.15	5.22	5.76	6.03	6.25	6.47
EOM	7.57	7.25	6.05	5.95	5.43	5.07	5.05	5.26	5.78	6.05	6.39	6.60
LOW	7.73	7.80	7.37	6.13	6.17	5.69	5.56	5.83	5.93	6.18	6.45	6.74
HIGH	7.26	7.06	5.71	5.68	5.32	4.83	4.95	5.13	5.22	5.78	6.06	6.22

WTR YR 1984 HIGH 4.83 MAR 28 LOW 7.80 NOV 1

DECATUR COUNTY

392022085371801. Local number, DC 2.

LOCATION.--Lat 39°20'22", long 85°37'18", in SE¼NE¼SW¼ sec.3, T.10 N., R.8 E., Decatur County, Hydrologic Unit 05120206, at the intersection of County Roads 50 North and 750 West and 7.5 mi west of Greensburg.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 49 ft, cased to 12.5 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 840.8 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 3.02 ft above land-surface datum.

PERIOD OF RECORD.--September 1966 to October 1971. September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.16 ft below land-surface datum, Dec. 10, 1966; lowest, 9.25 ft below land-surface datum, Feb. 9-11, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.73	7.29	1.93	4.96	4.80	1.79	.38	2.57	5.72	5.37	7.17	7.94
10	8.86	7.29	2.78	5.42	5.09	2.47	1.49	3.44	6.07	5.72	7.34	8.03
15	8.75	6.91	1.01	5.84	2.62	2.22	2.60	4.13	6.29	6.27	7.53	8.10
20	8.10	6.04	2.39	6.20	3.24	.70	1.97	4.58	6.52	6.71	7.67	8.14
25	6.61	3.99	3.58	6.26	3.19	1.13	.37	4.76	6.40	7.02	7.82	7.59
EOM	7.11	2.16	4.48	6.31	3.76	1.93	1.73	5.31	6.66	7.07	7.92	7.40
LOW	8.90	7.48	4.57	6.45	6.42	4.12	2.81	5.39	6.72	7.12	7.94	8.18
HIGH	6.52	1.71	.81	4.57	2.60	.70	.38	2.19	5.40	5.35	7.12	7.33

WTR YR 1984 HIGH .38 APR 5 LOW 8.90 OCT 12

DELAWARE COUNTY

400541085213701. Local number, DW 4.

LOCATION.--Lat 40°05'41", long 85°21'37", in SE¼NW¼SW¼ sec.9, T.19 N., R.10 E., Delaware County, Hydrologic Unit 05120201, on property owned by Monroe Township Conservation Club, and 8.0 mi south of Muncie.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 91 ft, cased to 89 ft, screened to 91 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 1,005 ft. Measuring point: Top of floor of shelter 2.88 ft above land-surface datum.

PERIOD OF RECORD.--October 1966 to October 1971. October 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 44.49 ft below land-surface datum, Aug. 1, 1979; lowest, 49.50 ft below land-surface datum, Oct. 13, 14, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	48.95	48.60	47.56	48.17	47.94	48.05	46.94	47.23	47.87	48.12	48.41	48.71
10	48.96	48.27	47.65	48.29	47.37	48.02	47.26	47.54	47.97	48.20	48.48	48.74
15	48.89	47.89	46.58	48.35	47.24	47.76	47.53	47.73	48.06	48.30	48.55	48.76
20	48.75	47.93	47.26	48.43	47.60	46.40	47.29	47.79	48.12	48.37	48.60	48.77
25	48.49	47.74	47.68	48.46	47.88	46.17	45.82	47.55	48.17	48.42	48.65	48.67
EOM	48.54	47.58	48.02	48.48	47.95	46.82	46.72	47.73	48.23	48.48	48.70	48.66
LOW	49.00	48.67	48.06	48.49	48.55	48.13	47.56	47.87	48.24	48.49	48.70	48.80
HIGH	48.47	47.55	46.51	48.06	47.22	46.16	45.68	46.88	47.76	48.12	48.41	48.64

WTR YR 1984 HIGH 45.68 APR 23, 24 LOW 49.00 OCT 1-4

ELKHART COUNTY

413121085481301. Local number, EH 4.

LOCATION.--Lat 41°31'21", long 85°48'13", in SW¼SE¼SW¼ sec.35, T.36 N., R.6 E., Elkhart County, Hydrologic Unit 04050001, at the southwest corner of Goshen Municipal Airport.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 62 ft, cased to 58 ft, screened to 60 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 818 ft. Measuring point: Top of floor of shelter 2.60 ft above land-surface datum.

PERIOD OF RECORD.--November 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.83 ft below land-surface datum, Mar. 23, 24, 1982; lowest, 16.18 ft below land-surface datum, Dec. 1-5, 1971.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.01	15.16	15.16	14.43	14.75	14.13	13.71	13.19	13.05	13.20	14.09	14.95
10	15.06	15.17	15.12	14.49	14.80	14.19	13.68	13.14	13.03	13.51	14.18	14.96
15	15.09	15.18	14.94	14.56	14.23	14.22	13.65	13.18	13.05	13.53	14.37	14.96
20	15.12	15.17	14.69	14.60	14.12	14.02	13.61	13.22	13.08	13.67	14.47	14.99
25	15.11	15.20	14.54	14.65	14.09	13.92	13.48	13.23	13.05	13.92	14.74	15.03
EOM	15.14	15.17	14.46	14.73	14.10	13.81	13.30	13.14	13.10	13.96	14.95	14.97
LOW	15.14	15.20	15.17	14.73	14.80	14.25	13.81	13.30	13.14	13.98	14.99	15.04
HIGH	14.98	15.14	14.46	14.43	14.08	13.81	13.30	13.14	13.03	13.11	13.98	14.94

WTR YR 1984 HIGH 13.03 JUN 8-10 LOW 15.20 NOV 24-26

ELKHART COUNTY

414419085544601. Local number, EH 5.

LOCATION.--Lat 41°44'19", long 85°54'46", in NW¼NE¼NE¼ sec.23, T.38 N., R.5 E., Elkhart County, Hydrologic Unit 04050001, on the inlet to Heaton Lake, and 3.5 mi east of Elkhart.
Owner: State of Indiana.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in, depth 13 ft, cased to 11 ft, screened to 13 ft. Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 770 ft. Measuring point: Top of floor of shelter 2.10 ft above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.37 ft below land-surface datum, Jun. 16, 1981; lowest, 5.57 ft below land-surface datum, Jan. 28, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.04	5.09	4.43	3.81	3.95	3.41	3.15	3.07	3.11	3.56	3.69	4.49
10	5.12	5.13	4.29	3.84	3.94	3.48	3.23	3.16	3.21	3.74	3.55	4.52
15	5.12	5.06	3.72	3.93	3.06	3.22	3.04	3.24	3.31	3.81	3.78	4.52
20	5.19	5.00	3.73	3.98	3.09	2.96	2.92	3.21	3.37	3.97	3.99	4.65
25	4.85	4.91	3.77	4.07	3.23	3.04	2.82	2.79	3.29	3.51	4.21	4.43
EOM	5.05	4.53	3.82	4.11	3.30	3.15	2.94	2.80	3.47	3.58	4.41	4.53
LOW	5.19	5.14	4.57	4.12	4.14	3.60	3.31	3.31	3.48	4.13	4.44	4.77
HIGH	4.85	4.50	3.72	3.81	2.91	2.96	2.80	2.63	2.87	3.42	3.48	4.43

WTR YR 1984 HIGH 2.63 MAY 27 LOW 5.19 OCT 18-22

ELKHART COUNTY

414351085540401. Local number, EH 6.

LOCATION.--Lat 41°43'51", long 85°54'04", in NW¼NE¼SW¼ sec.24, T.38 N., R.5 E., Elkhart County, Hydrologic Unit 04050001, on the southeast shore of Heaton Lake, and 4.0 mi east of Elkhart.
Owner: State of Indiana.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in, depth 22 ft, cased to 20 ft, screened to 22 ft. Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 770 ft. Measuring point: Top of floor of shelter 2.50 ft above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.10 ft below land-surface datum, Jun. 16-19, 1981; lowest, 10.43 ft below land-surface datum, Nov. 10 to Dec. 3, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5				8.87	9.24	8.10	7.57	7.16	7.02	7.88	8.54	9.37
10				8.95	9.27	8.26	7.65	7.26	7.19	8.16	8.42	9.45
15				9.06	8.42	8.25	7.64	7.39	7.33	8.36	8.54	9.50
20				9.08	7.94	7.80	7.43	7.51	7.46	8.66	8.81	9.53
25				9.14	7.93	7.70	7.21	7.33	7.54	8.52	9.03	9.60
EOM				9.21	7.96	7.62	7.10	6.94	7.67	8.44	9.25	9.60
LOW				9.22	9.27	8.37	7.70	7.53	7.70	8.83	9.27	9.60
HIGH				8.87	7.93	7.62	7.10	6.94	6.94	7.70	8.42	9.27

WTR YR 1984 HIGH 6.94 MAY 30-JUN 2 LOW 9.60 SEP 22-30

ELKHART COUNTY

414514085505001. Local number, EH 7.

LOCATION.--Lat 41°45'14", long 85°50'50", in SW¼SE¼SW¼ sec.9, T.38 N., R.6 E., Elkhart County, Hydrologic Unit 04050001, on north side of County Road 2, 200 ft east of County Road 21, and 2.7 mi northwest of Bristol. Owner: U.S. Geological Survey.

AQUIFER.--Fine to medium sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 61 ft, cased to 56 ft, screened to 61 ft. Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 781 ft. Measuring point: Top of floor of shelter 3.70 ft above land-surface datum.

PERIOD OF RECORD.--June 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.72 ft below land-surface datum, Mar. 17, 1982; lowest, 11.61 ft below land-surface datum, Sept. 5, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.42	11.50	11.46	10.78	11.09	10.31	9.87	9.01	8.93	9.91	10.54	11.00
10	11.43	11.50	11.38	10.83	11.13	10.36	9.87	9.09	9.03	10.37	10.16	10.96
15	11.44	11.51	11.18	10.90	10.56	10.35	9.83	9.24	9.17	10.57	10.06	10.96
20	11.47	11.51	10.92	10.95	10.37	10.05	9.43	9.33	9.28	10.84	10.56	10.97
25	11.48	11.53	10.82	11.00	10.33	10.01	9.20	9.35	9.37	10.80	10.76	10.99
EOM	11.51	11.52	10.79	11.06	10.31	9.92	9.02	8.92	9.48	10.54	11.03	10.90
LOW	11.51	11.53	11.53	11.07	11.14	10.44	9.92	9.40	9.52	11.02	11.04	11.05
HIGH	11.42	11.50	10.79	10.78	10.30	9.92	9.02	8.92	8.91	9.52	10.06	10.90

WTR YR 1984 HIGH 8.91 JUN 1, 2, LOW 11.53 NOV 24-DEC 1

ELKHART COUNTY

414446086002501. Local number, EH 8.

LOCATION.--Lat 41°44'46", long 86°00'25", in SW¼SE¼SW¼ sec.36, T.38 N., R.4 E., Elkhart County, Hydrologic Unit 04050001, 50 feet north of Bristol Street (C. R. 10), 400 feet west of intersection of Bristol Street (10), and Nappanee Street extension, in Elkhart.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 5 in, depth 80 ft, cased to 70 ft, screened to 80 ft. Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 763.36 ft National Geodetic Vertical Datum of 1929. Measuring point: "V" notch filed on top of well casing 2.5 ft above land-surface datum.

PERIOD OF RECORD.--March 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.98 ft below land-surface datum, May 7, 1983; lowest, 11.74 ft below land-surface datum, Nov. 26, 27 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.49	11.56	11.54	11.10	11.35	10.55	10.07	9.64	9.24	10.18	10.93	11.33
10	11.54	11.59	11.46	11.22	11.36	10.66	10.12	9.74	9.47	10.34	10.78	11.36
15	11.57	11.65	11.24	11.27	10.84	10.70	10.09	9.91	9.65	10.46	10.95	11.40
20	11.59	11.64	11.09	11.35	10.60	10.40	9.98	9.93	9.82	10.62	11.06	11.44
25	11.53	11.71	11.04	11.37	10.57	10.25	9.71	9.70	9.87	10.75	11.15	11.43
EOM	11.54	11.60	11.10	11.42	10.56	10.13	9.51	9.11	10.03	10.88	11.25	11.42
LOW	11.60	11.74	11.61	11.45	11.44	10.80	10.16	9.96	10.06	10.91	11.28	11.53
HIGH	11.47	11.54	11.03	11.09	10.53	10.13	9.51	9.11	9.11	10.06	10.74	11.26

WTR YR 1984 HIGH 9.11 MAY 31,JUN 1 LOW 11.74 NOV. 26,27

FRANKLIN COUNTY

392416085004301. Local number, FR 5.

LOCATION.--Lat 39°24'16", long 85°00'43", in SE¼NE¼NW¼ sec.32, T.9 N., R.2 W., Franklin County, Hydrologic Unit 05080003, adjacent to property of Franklin County Conservation Club, 1.0 mi south of Brookville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 61 ft, cased to 57 ft, screened to 59 ft.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 621.79 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.70 ft above land-surface datum.

PERIOD OF RECORD.--March 1968 to October 1971. September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.95 ft below land-surface datum, May 24, 1968; lowest, 27.32 ft below land-surface datum, Feb. 1, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.75	25.83	24.59	25.60	25.12	25.19	22.02	23.11	25.02	25.86	26.25	26.64
10	26.74	25.76	24.63	25.75	25.49	24.99	22.76	23.55	25.45	25.83	26.23	26.69
15	26.31	25.46	23.67	25.90	24.91	24.75	23.61	24.12	25.71	26.13	26.26	26.73
20	26.10	25.37	24.13	26.06	25.13	23.47	23.04	24.63	25.90	26.32	26.45	26.75
25	25.76	24.68	24.88	25.93	25.39	23.17	21.10	23.68	26.01	26.44	26.54	26.51
EOM	25.81	24.12	25.34	25.66	25.21	23.27	22.62	24.44	26.02	26.30	26.59	26.40
LOW	26.77	25.84	25.40	26.22	25.81	25.42	23.83	24.71	26.08	26.46	26.61	26.78
HIGH	25.76	24.11	23.60	25.40	24.91	23.01	21.10	22.84	24.53	25.72	26.19	26.34

WTR YR 1984 HIGH 21.10 APR 25 LOW 26.78 SEP 22, 23

FULTON COUNTY

405829086175801. Local number, FU 7.

LOCATION.--Lat 40°58'29", long 86°17'58", in NW¼NW¼SW¼ sec.10, T.29 N., R.2 E., Fulton County, Hydrologic Unit 05120106, 2.5 mi northwest of Fulton.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 102 ft, cased to 96 ft, screened to 102 ft.
Instrumentation: Water-stage recorder.

DATUM.--Datum is 776.45 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.50 ft above land-surface datum.

PERIOD OF RECORD.--August 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.35 ft below land-surface datum, Apr. 23-27, 1973; lowest, 12.62 ft below land-surface datum, Oct. 19, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.39	12.45	12.15	10.85	11.15	9.69	8.18	8.77	7.90	9.50	10.68	11.67
10	12.52	12.42	11.83	11.01	11.14	9.85	8.38	8.98	8.29	9.84	10.94	11.66
15	12.54	12.46	11.06	11.13	9.98	9.85	8.46	9.21	8.50	10.14	11.13	11.79
20	12.54	12.43	10.94	11.16	9.56	8.94	8.60	9.09	8.62	10.38	11.34	11.85
25	12.39	12.55	10.86	11.13	9.54	8.42	8.51	8.23	8.89	10.58	11.39	11.92
EOM	12.47	12.40	10.95	11.25	9.57	8.17	8.55	7.60	9.14	10.49	11.79	12.03
LOW	12.62	12.58	12.41	11.26	11.28	10.01	8.70	9.33	9.21	10.67	11.80	12.04
HIGH	12.34	12.39	10.78	10.85	9.51	7.98	8.18	7.60	7.63	9.22	10.53	11.63

WTR YR 1984 HIGH 7.60 MAY 30,31 LOW 12.62 OCT 19

GRANT COUNTY

402322085481901. Local number, GT 8.

LOCATION.--Lat 40°23'22", long 85°48'19", in NW¼SW¼NW¼ sec.1, T.22 N., R.6 E., Grant County, Hydrologic Unit 05120107, located on County Road 700 West right of way, and 1.0 mi northwest of Rigdon.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 35 ft, cased to 20 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 880 ft. Measuring point: Top of floor of shelter 3.10 ft above land-surface datum.

PERIOD OF RECORD.--October 1966 to October 1971. July 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.16 ft below land-surface datum, Mar. 21, 1984: lowest, 10.66 ft below land-surface datum, Oct. 29, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.54	9.26	3.15	4.04	4.14	3.23	2.01	3.52	3.47	4.68	6.02	6.91
10	9.75	8.77	2.90	4.45	4.04	3.30	2.63	3.78	3.87	4.72	5.65	6.92
15	9.85	6.01	1.84	4.57	2.81	2.97	2.86	3.75	4.17	5.03	5.88	7.17
20	9.81	5.07	3.12	4.70	2.42	1.21	2.47	3.74	4.33	5.35	6.21	7.23
25	9.28	4.76	3.20	4.62	2.64	1.28	2.20	3.34	4.45	5.56	6.46	7.39
EOM	9.30	3.69	4.14	4.86	2.91	2.31	2.80	3.01	4.62	5.80	6.69	7.53
LOW	10.18	9.37	4.16	4.88	4.86	3.70	3.15	3.99	4.90	6.15	6.90	7.82
HIGH	9.18	3.68	1.74	4.04	2.36	1.16	2.01	3.01	3.06	4.67	5.65	6.74

WTR YR 1984 HIGH 1.16 MAR 21 LOW 10.18 OCT 17

HAMILTON COUNTY

400000086023001. Local number, HA 5.

LOCATION.--Lat 40°00'00", long 86°02'30", in NE¼NE¼NW¼ sec.23, T.18 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, on south side of 146th Street, 1.0 mi west of White River, 1.2 mi west of Allisonville Road, and 3.5 mi southwest of Noblesville.
Owner: Earlham College.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 100 ft, cased to 80 ft, screened to 85 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 755.47 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.76 ft above land-surface datum.

PERIOD OF RECORD.--July 1965 to September 1971, July 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.00 ft below land-surface datum, Feb. 24, 25, 1982; lowest, 11.66 ft below land-surface datum, Sept. 19, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.30	10.94	10.07	9.99	10.14	9.93	9.05	9.47	10.05	10.03	10.55	10.90
10	11.31	10.89	9.87	10.07	10.12	9.93	9.25	9.61	10.15	10.10	10.59	10.93
15	11.26	10.76	9.36	10.18	9.84	9.79	9.39	9.74	10.23	10.24	10.67	10.95
20	11.09	10.73	9.57	10.28	9.84	8.67	9.46	9.85	10.30	10.36	10.74	10.97
25	10.94	10.56	9.72	10.35	9.88	8.60	9.17	9.89	10.27	10.44	10.81	10.86
EOM	10.92	10.31	9.90	10.36	9.88	8.94	9.31	9.95	10.36	10.49	10.86	10.80
LOW	11.31	10.98	10.31	10.37	10.38	10.00	9.51	9.97	10.38	10.51	10.87	11.00
HIGH	10.90	10.31	9.36	9.92	9.84	8.55	9.00	9.37	9.97	10.02	10.51	10.79

WTR YR 1984 HIGH 8.55 MAR 22,23 LOW 11.31 OCT 4,5,8-13

HARRISON COUNTY

382323086044501. Local number, HR 8.

LOCATION.--Lat 38°23'23", long 86°04'45", in NW¼NW¼NE¼ sec.33, T.1 S., R.4 E., Harrison County, Hydrologic Unit 05140104, on Harrison County road right of way, 2.0 mi southeast of Palmyra.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 93 ft, cased to 54 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 827 ft. Measuring point: Top of floor of shelter 3.10 ft above land-surface datum.

PERIOD OF RECORD.--November 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.98 ft below land-surface datum, Apr. 2, 1979; lowest, 19.71 ft below land-surface datum, Nov. 5, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.62	12.80	3.54	6.95	7.87	3.21	1.61	2.29	5.71	2.91	10.95	13.63
10	16.94	13.04	4.45	7.75	8.05	4.22	3.19	1.97	6.97	4.10	11.53	14.02
15	17.17	12.70	2.90	8.44	4.01	4.35	3.85	3.40	8.10	6.31	12.11	14.41
20	17.24	11.47	4.19	9.07	4.67	2.08	4.40	4.40	8.94	7.94	12.36	14.77
25	13.04	6.31	4.67	9.28	5.53	2.54	2.27	3.24	9.77	9.16	12.72	15.11
EOM	12.65	3.45	6.21	9.40	5.89	2.87	3.44	4.57	10.44	10.26	13.21	15.43
LOW	17.38	13.09	6.31	9.63	9.57	6.31	4.58	5.07	10.57	10.92	13.29	15.49
HIGH	12.64	3.28	2.69	6.31	3.99	1.98	1.25	1.25	4.78	2.61	10.43	13.30

WTR YR 1984 HIGH 1.25 APR 22, MAY 8 LOW 17.38 OCT 19,20

HENDRICKS COUNTY

394025086400801. Local number, HD 4.

LOCATION.--Lat 39°40'25", long 86°40'08", in NW¼NW¼NW¼ sec.8, T.14 N., R.2 W., Hendricks County, Hydrologic Unit 05120203, at the intersection of State Highway 75 and County Road 600 South on county right of way, and 1.0 mi south of Coatesville.
Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 85 ft, cased to 70 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 860 ft. Measuring point: Top of floor of shelter 1.92 ft above land-surface datum.

REMARKS.--Water level affected by pumpage.

PERIOD OF RECORD.--October 1966 to September 1971. November 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 18.65 ft below land-surface datum, Jan. 30, 1976; lowest, 28.0 ft below land-surface datum, January 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.50	24.64	21.69	21.77	22.57	20.92	20.31	20.48	21.42	22.79	23.74	24.90
10	25.60	24.53	21.21	22.08	22.67	20.71	20.23	20.69	21.84	23.03	23.98	25.09
15	25.63	24.24	20.55	22.28	22.04	20.54	20.49	21.16	22.27	23.31	24.16	25.20
20	25.60	23.85	20.76	22.47	21.20	20.14	20.39	21.45	22.65	23.46	24.43	25.35
25	24.88	23.40	21.00	22.55	21.13	20.03	19.99	21.21	22.68	23.61	24.66	25.38
EOM	24.62	22.50	21.59	22.66	20.95	20.24	20.05	21.49	22.89	23.61	24.84	25.27
LOW	26.47	24.94	22.51	22.80	22.96	21.25	20.70	21.75	23.09	23.82	24.97	25.64
HIGH	24.62	22.50	20.55	21.63	20.95	19.95	19.89	20.29	21.36	22.79	23.65	24.90

WTR YR 1984 HIGH 19.89 APR 23 LOW 26.47 OCT 1

JASPER COUNTY

410249087011201. Local number, JP 4.

LOCATION.--Lat 41°02'49", long 87°01'12", in SW¼NE¼SW¼ sec.17, T.30 N., R.5 W., Jasper County, Hydrologic Unit 07120002, on property of William Gehring, Inc., 0.9 mi east of Newland.
Owner: William Gehring, Inc.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 16 in, depth 300 ft.
Instrumentation: Water-stage recorder.

DATUM.--Datum is 676.93 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 0.00 ft above land-surface datum.

REMARKS.--Water level may be affected by irrigation pumpage.

PERIOD OF RECORD.--July 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.95 ft below land-surface datum, Apr. 9, 1962; lowest, 40.17 ft below land-surface datum, July 25, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.69	6.61	5.11	3.42	3.33	2.77	2.31	2.87	2.70	7.30	11.90	11.52
10	10.63	6.15	4.93	3.77	3.38	2.87	2.55	2.94	3.28	11.95	12.14	11.48
15	9.87	5.93	4.27	3.52	3.23	2.76	2.44	3.15	4.75	12.92	12.62	10.24
20	8.78	5.52	4.22	3.64	2.94	---	2.75	2.90	4.75	13.56	11.63	9.24
25	7.83	5.74	3.90	3.43	2.92	---	2.56	2.90	6.44	12.06	12.19	8.79
EOM	7.10	5.55	3.86	3.49	2.88	2.53	2.36	2.77	6.87	9.83	11.99	8.75
LOW	11.47	7.13	5.63	3.92	3.72	3.13	2.85	3.37	7.35	14.15	13.17	12.59
HIGH	7.10	5.37	3.69	3.28	2.75	2.22	2.29	2.61	2.69	7.30	10.52	8.54

WTR YR 1984 HIGH 2.22 MAR 28 LOW 14.15 JUL 20

JASPER COUNTY

410809087580801. Local number, JP 7.

LOCATION.--Lat 41°08'10", long 86°58'08", in SE¼SE¼NE¼ sec.15, T.31 N., R.5 W., Jasper County, Hydrologic Unit 07120002, in northwest corner of intersection of County Roads 850N and 400E, 4.0 mi south of Tefft.
Owner: U.S. Geological Survey.

AQUIFER.--Dolomite of Middle Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 130 ft, cased to 94 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Datum is 699.38 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.75 ft above land-surface datum.

REMARKS.--Water level affected by pumpage.

PERIOD OF RECORD.--May 1967 to current year. (Semi-annual tape-down readings only September 1971 to May 1978).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.12 ft below land-surface datum, Apr. 3, 1982; lowest, 16.04 ft below land-surface datum, Sept. 6, 1984.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.38	8.53	8.08	7.42	7.44	7.26	6.94	7.04	7.03	7.37	14.70	15.86
10	8.73	8.20	8.24	7.88	7.59	7.41	7.24	7.27	7.07	8.79	14.83	15.66
15	8.75	8.24	7.68	7.91	7.65	7.21	6.94	7.53	7.25	11.74	15.12	13.66
20	8.77	7.88	8.21	7.94	7.44	6.88	7.29	7.15	7.26	13.39	15.26	12.04
25	8.66	8.32	7.95	7.53	7.43	7.09	7.02	6.97	7.19	14.27	15.51	11.26
EOM	8.68	8.32	8.01	7.69	7.39	7.31	6.75	7.04	7.25	14.53	15.62	10.83
LOW	8.99	8.82	8.53	8.20	8.05	7.72	7.43	7.71	7.45	14.70	15.70	16.04
HIGH	8.33	7.88	7.48	7.33	7.22	6.77	6.75	6.82	6.95	7.22	14.56	10.83

WTR YR 1984 HIGH 6.75 APR 30 LOW 16.04 SEP 6

JASPER COUNTY

410535087035801. Local number, JP 8.

LOCATION.--Lat 41°05'35", long 87°03'58", in NE¼NE¼SE¼ sec.35, T.31 N., R.6 W., Jasper County, Hydrologic Unit 07120002, 1.7 miles north of Gifford.
Owner: William Gehring, Inc.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 12 in, depth 310 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 686 ft. Measuring point: Lower lip of 2 in tapedown pipe, 2.10 ft above land-surface datum.

REMARKS.--Water level may be affected by irrigation pumpage.

PERIOD OF RECORD.--May 1978 to current year. Record prior to Oct. 1, 1978 available in District files.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.77 ft below land-surface datum, May 3, 4, 1983; lowest, 25.11 ft below land-surface datum, July 26, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.53	12.44	11.52	---	10.61	10.11	---	---	9.85	11.15	16.03	15.14
10	13.50	12.22	11.38	---	10.72	10.12	9.71	---	9.91	12.20	15.80	14.48
15	13.34	12.14	10.79	---	10.30	10.12	---	---	10.10	---	16.90	14.27
20	13.23	11.94	10.81	---	10.12	9.75	---	---	10.21	17.86	16.43	13.90
25	12.77	11.94	10.70	---	10.12	9.62	---	9.95	10.50	15.63	16.07	13.64
EOM	12.61	11.75	---	10.62	10.10	---	---	9.78	10.74	14.39	15.17	13.51
LOW	13.81	12.61	11.75	10.67	10.77	10.12	9.78	9.98	10.78	21.51	21.06	15.17
HIGH	12.61	11.73	10.54	10.53	10.10	9.45	9.71	9.78	9.76	10.78	15.17	13.51

WTR YR 1984 HIGH 9.45 MAR 28,29 LOW 21.51 JUL 20

JASPER COUNTY

410713087063201. Local number, JP 9.

LOCATION.--Lat 41°07'13", long 87°06'32", in NE¼SW¼SE¼ sec.21, T.31 N., R.6 W., Jasper County, Hydrologic Unit 07120002, 4.4 miles northwest of Gifford.
Owner: William Gehring, Inc.

AQUIFER.--Silurian Limestone.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 18 in, depth 260 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 685 ft. Measuring point: Lower lip of 2 in tapedown pipe, 2.10 ft above land-surface datum.

REMARKS.--Water level may be affected by irrigation pumpage.

PERIOD OF RECORD.--July 1978 to current year. Record prior to Oct. 1, 1978 available in District files.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.18 ft below land-surface datum, Apr. 3, 1982; lowest, 30.25 ft below land-surface datum, July 28, Aug. 12, 13, 14, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.16	8.25	7.33	6.10	6.23	5.64	4.86	5.02	5.03	11.98	20.70	16.37
10	9.11	7.99	7.25	6.32	6.34	5.76	5.10	5.16	5.07	16.42	19.41	12.40
15	8.97	7.94	6.62	6.40	6.12	5.65	4.94	5.37	5.19	23.17	25.33	11.19
20	8.83	7.76	6.71	6.38	5.80	5.13	5.11	5.21	5.27	26.94	24.66	10.26
25	8.58	7.85	6.46	6.22	5.70	5.06	4.91	5.02	6.10	21.90	19.38	9.77
EOM	8.45	7.67	6.46	6.36	5.66	5.10	4.96	4.99	7.59	16.34	15.53	9.47
LOW	9.51	8.45	7.75	6.49	6.56	5.87	5.21	5.48	8.42	28.06	29.13	21.73
HIGH	8.41	7.58	6.23	6.10	5.62	4.84	4.86	4.95	4.94	8.57	15.53	9.47

WTR YR 1984 HIGH 4.84 MAR 28 LOW 29.13 AUG 19

JASPER COUNTY

410322087165101. Local number, JP 11.

LOCATION.--Lat 41°03'22", long 87°16'31", in NW¼NW¼NW¼ sec.18, T.30 N., R.7 W., Jasper County, Hydrologic Unit 07120002, on Prudential Life Insurance Company of America property, 3.2 mi north of State Highway 14, and 1.5 mi southwest of Fair Oaks.
Owner: Prudential Insurance Company of America.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 16 in, depth 630 ft, cased to 63 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 680 ft. Measuring point: Top of floor of shelter 3.50 ft above land-surface datum.

REMARKS.--Water level may be affected by irrigation pumpage.

PERIOD OF RECORD.--March 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.04 ft above land-surface datum, Apr. 3, 1982; lowest, 51.48 ft below land-surface datum, July 20, 1984.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.98	6.86	5.12	3.46	3.10	2.25	1.33	1.53	1.28	35.34	36.92	31.88
10	9.29	6.41	4.95	3.67	3.12	2.32	1.59	1.66	1.36	39.93	25.13	20.82
15	8.73	6.20	4.23	3.62	2.82	2.20	1.45	1.89	1.56	36.11	39.63	16.15
20	8.24	5.79	4.29	3.58	2.47	1.60	1.60	1.63	1.61	50.55	31.46	13.71
25	7.70	5.83	3.99	3.30	2.40	1.49	1.40	1.31	4.04	44.80	32.14	12.33
EOM	7.27	5.55	3.86	3.31	2.41	1.53	1.33	1.21	23.40	37.42	19.99	11.27
LOW	10.87	7.27	5.61	3.91	3.42	2.52	1.69	1.96	27.46	51.48	51.26	33.47
HIGH	7.27	5.46	3.70	3.16	2.32	1.21	1.33	1.21	1.18	22.85	19.99	11.27

WTR YR 1984 HIGH 1.18 JUN 1 LOW 51.48 JUL 20

JASPER COUNTY

410145087130401. Local number, JP 12.

LOCATION.--Lat 41°01'45", long 87°13'04", in NW¼SW¼SW¼ sec.22, T.30 N., R.7 W., Jasper County, Hydrologic Unit 07120002, in Old Union Township school yard, 200 ft east of County Road 900 West, 750 ft north of State Highway 14, and in Parr.
Owner: Prudential Insurance Company of America.

AQUIFER.--Limestone/Dolomite of Silurian/Devonian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in, depth 150 ft, cased to 103 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 695 ft. Measuring point: Top of well casing 2.7 ft above land-surface datum.

REMARKS.--Water level may be affected by irrigation pumpage.

PERIOD OF RECORD.-- May 24, 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.08 ft below land-surface datum, May 22, 1983; lowest, 48.02 ft below land-surface datum, July 21, 1984.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.14	21.85	19.77	17.70	17.03	16.14	15.18	15.16	15.14	27.26	43.24	38.27
10	25.16	21.28	19.63	17.86	17.07	16.17	15.31	15.20	15.09	---	37.48	36.73
15	24.32	20.97	18.92	17.74	16.97	15.98	15.09	15.45	15.22	---	38.96	32.80
20	23.66	20.44	18.88	17.68	16.61	15.63	15.33	15.30	15.32	46.66	42.21	30.18
25	22.94	20.49	18.55	17.32	16.47	15.60	15.09	15.13	15.51	44.37	39.89	28.52
EOM	22.36	20.23	18.24	17.28	16.30	15.51	14.91	15.10	19.75	41.64	36.00	27.19
LOW	27.37	22.39	20.36	18.32	17.45	16.54	15.60	15.65	21.27	48.02	46.83	40.19
HIGH	22.36	20.09	18.12	17.11	16.22	15.29	14.91	15.05	15.01	21.34	35.69	27.19

WTR YR 1984 HIGH 14.91 APR 30 LOW 48.02 JUL 21

JASPER COUNTY

405902087141501. Local number, JP 13.

LOCATION.--Lat 40°59'02", long 87°14'15", in NW¼NW¼NW¼ sec.9, T.29 N., R.7 W., Jasper County, Hydrologic Unit 07120002, at southwest corner of North Newton school, and 4.6 mi northwest of Rensselaer.
Owner: Prudential Insurance Company of America.

AQUIFER.--Dolomite of Silurian/Devonian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in, depth 150 ft, cased to 106 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 700 ft. Measuring point: Top of well casing 3.4 ft above land-surface datum.

REMARKS.--Water level may be affected by irrigation pumpage.

PERIOD OF RECORD.--March 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 20.98 ft below land-surface datum, Apr. 3, 1982; lowest, 51.90 ft below land-surface datum, Aug. 4, 1984.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	36.67	31.35	28.78	26.47	25.42	24.59	23.60	23.28	23.19	32.23	51.34	46.26
10	35.48	30.68	28.59	26.60	25.41	24.57	23.69	23.27	23.14	36.39	48.21	46.33
15	34.43	30.29	27.93	26.38	25.37	24.32	23.40	23.49	23.25	41.53	47.34	43.74
20	33.59	29.67	27.90	26.26	25.11	24.00	23.56	23.22	23.31	46.41	50.55	41.23
25	32.75	29.63	27.42	25.84	25.00	24.02	23.33	23.09	23.41	48.92	49.61	39.46
EOM	32.00	29.32	27.13	25.71	24.82	23.98	23.11	23.14	26.50	48.78	46.13	37.94
LOW	38.15	32.01	29.41	27.21	25.80	24.95	24.04	23.64	27.72	50.15	51.90	47.38
HIGH	32.00	29.17	27.03	25.57	24.73	23.73	23.11	23.09	23.08	27.79	46.13	37.94

WTR YR 1984 HIGH 23.08 JUN 1,2 LOW 51.90 AUG 4

JEFFERSON COUNTY

384949085251901. Local number, JF 5.

LOCATION.--Lat 38°49'49", long 85°25'19", in SE¼NW¼SW¼ sec. 33, T.5 N., R.10 E., Jefferson County, Hydrologic Unit 05120207, on Jefferson Proving Ground, 500 ft north of Airfield Road, 1,000 ft southwest of the watertower and 2.2 mi west of main gate.
Owner: U.S. Army

AQUIFER.--Limestone, Dolomite, and shale of Silurian and Ordovician Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in, depth 200 ft, cased to 33 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 855 ft. Measuring point: Top of floor of shelter 3.00 ft above land-surface datum.

REMARKS.--This well was drilled on a mapped fracture trace.

PERIOD OF RECORD.--March 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.17 ft below land surface datum, Dec. 28, 1982; lowest, 8.54 ft below land surface datum, Oct. 9, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.10	6.62	4.73	4.46	4.89	4.55	4.39		5.13	6.70	7.01	7.40
10	8.36	6.16	4.71	4.78	4.94	4.63	4.63		---	6.68	7.04	7.28
15	8.37	5.95	4.34	4.98	4.92	4.56	4.56		---	6.76	7.18	7.47
20	8.08	5.46	4.49	4.95	4.78	4.32	4.79		6.13	6.99	7.21	7.36
25	7.59	5.41	4.41	4.94	4.74	4.40	4.58		6.34	7.09	7.34	7.37
EOM	7.04	5.14	4.15	4.90	4.70	4.67	---		6.58	7.07	7.35	7.38
LOW	8.54	7.14	5.25	5.11	5.27	4.90	4.89		6.73	7.29	7.51	7.68
HIGH	7.04	4.99	4.15	4.46	4.44	4.18	4.37		5.10	6.66	6.96	7.26

WTR YR 1984 HIGH 4.15 DEC 28-31 LOW 8.54 OCT 9

JENNINGS COUNTY

385601085365701. Local number, JN 3.

LOCATION.--Lat 38°56'01", long 85°36'57", in SE¼SW¼NE¼ sec.27, T.6 N., R.8 E., Jennings County, Hydrologic Unit 05120207, 200 ft west of State Highway 3, 1.6 mi south of Crosley Fish and Game Office and 3.0 mi south of Vernon.
Owner: U.S. Geological Survey.

AQUIFER.--Limestones and dolomites of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 180 ft, cased to 45 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 718 ft. Measuring point: Top of floor of shelter 3.50 ft above land-surface datum.

PERIOD OF RECORD.--October 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 36.64 ft below land-surface datum, Jan. 21, 1979; lowest, 40.52 ft below land-surface datum, Sept. 18, 1981.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	39.39	38.70	38.16	38.40	38.38	38.42	38.23	38.41	39.17	39.48	39.57	39.53
10	39.67	38.50	38.45	38.66	38.63	38.48	38.44	38.42	39.42	39.33	39.46	39.46
15	39.48	38.41	38.03	38.68	38.66	38.36	38.33	38.73	39.65	39.51	39.72	39.64
20	39.05	38.18	38.55	---	38.63	38.08	38.57	38.74	39.72	39.71	39.77	39.63
25	39.62	38.34	38.50	38.64	38.59	38.22	38.19	38.83	39.75	39.81	39.99	39.47
EOM	38.80	38.35	38.84	38.72	38.55	38.58	38.35	38.96	39.80	39.81	39.56	39.32
LOW	39.76	38.86	38.93	38.87	38.91	38.77	38.65	39.07	39.84	39.93	40.05	39.87
HIGH	38.44	38.11	37.87	38.35	38.31	38.02	38.08	38.27	38.96	39.31	39.35	39.32

WTR YR 1984 HIGH 37.87 DEC 14 LOW 40.05 AUG 25

KNOX COUNTY

383247087361001. Local number, KN 7.

LOCATION.--Lat 38°32'47", long 87°36'10", in SE¼SE¼NW¼ sec.2, T.1 N., R.11 W., Knox County, Hydrologic Unit 05120113, in the right of way of Sixth Street Road, 9.8 mi south of Vincennes.
Owner: Michael J. Kelley.

AQUIFER.--Sand and Gravel Quaternary Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 43 ft, cased to 16 ft, slotted to 19 ft, open end.
Instrumentation: Water-stage recorder. Prior to April 1968, handtaped monthly.

DATUM.--Altitude of land-surface datum is 405 ft. Measuring point: Top of floor of shelter 2.42 ft above land-surface datum.

PERIOD OF RECORD.--November 1956 to December 1972. January 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.57 ft below land-surface datum, May 3, 1983; lowest, 11.35 ft below land-surface datum, Feb. 1-13, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.41	9.58	7.79	9.39	9.42	7.85	6.63	6.24	8.78	9.48	10.21	10.61
10	10.46	9.70	8.34	9.59	9.42	8.51	7.72	7.02	8.94	9.63	10.30	10.66
15	10.54	9.85	7.61	9.75	7.97	8.90	7.75	5.99	9.15	9.83	10.37	10.70
20	9.47	9.91	8.48	9.88	8.83	6.51	7.61	7.81	9.33	9.98	10.41	10.73
25	8.60	9.21	8.77	9.96	9.09	7.35	5.15	8.20	9.46	10.09	10.48	10.75
EOM	9.33	7.00	9.20	10.01	9.17	6.78	5.94	8.57	9.67	10.20	10.54	10.75
LOW	10.70	10.01	9.24	10.03	10.03	9.28	8.50	8.60	9.70	10.21	10.56	10.75
HIGH	7.92	6.59	7.41	9.24	7.67	6.37	4.75	5.99	8.60	9.45	10.19	10.56

WTR YR 1984 HIGH 4.75 APR 22 LOW 10.75 SEP 24-30

KOSCIUSKO COUNTY

411839085451601. Local number, KO 4.

LOCATION.--Lat 41°18'39", long 85°45'16", in NE¼SW¼SE¼ sec.18, T.33 N., R.7 E., Kosciusko County, Hydrologic Unit 05120106, on the county right of way of Armstrong Road, and 2.0 mi east of Oswego.
Owner: State of Indiana.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in, depth 22 ft, cased to 20 ft, screened to 22 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 852 ft. Measuring point: Top of floor of shelter 3.00 ft above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.42 ft below land-surface datum, Mar. 24-26, 1982; lowest, 12.96 ft below land-surface datum, Dec. 19-24, 1979.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.35	12.23	11.99	11.30	11.44	11.55	11.12	11.31	11.18	11.63	11.98	12.31
10	12.36	12.23	11.82	11.32	11.46	11.72	11.24	11.42	11.19	11.75	12.01	12.30
15	12.35	12.22	11.44	11.38	10.99	11.85	11.35	11.56	11.32	11.83	12.09	12.32
20	12.34	12.19	11.36	11.41	10.94	11.59	11.36	11.65	11.46	11.93	12.15	12.39
25	12.24	12.17	11.33	11.45	10.99	11.31	11.30	11.55	11.44	11.96	12.19	12.41
EOM	12.23	12.05	11.31	11.48	11.25	11.12	11.23	11.19	11.52	11.96	12.27	12.44
LOW	12.36	12.23	12.05	11.48	11.49	11.85	11.36	11.65	11.55	12.00	12.28	12.45
HIGH	12.23	12.05	11.31	11.30	10.94	11.12	11.12	11.19	11.17	11.55	11.96	12.28

WTR YR 1984 HIGH 10.94 FEB 19, 20 LOW 12.45 SEP 30

KOSCIUSKO COUNTY

412554085450001. Local number, KO 6.

LOCATION.--Lat 41°25'54", long 85°45'00", in NW¼SW¼NW¼ sec.5, T.34 N., R.7 E., Kosciusko County, Hydrologic Unit 04050001, west end of North Shore Drive and Lakeview Park in Syracuse, Indiana.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2 in, depth 23 ft, cased to 20 ft, screened to 23 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 870 ft. Measuring point: Top of floor of shelter 3.00 ft above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.61 ft below land-surface datum, Apr. 19-21, 1982; lowest, 10.64 ft below land-surface datum, Feb. 9, 1979.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.74	9.87	9.83	9.62	9.92	9.80	9.31	9.09	8.98	8.96	9.29	9.62
10	9.76	9.91	9.77	9.69	9.97	9.82	9.36	9.11	8.99	9.03	9.23	9.65
15	9.77	9.97	9.46	9.73	9.72	9.75	9.30	9.20	8.95	9.10	9.33	9.67
20	9.83	9.92	9.50	9.85	9.67	9.49	9.19	9.19	8.92	9.20	9.38	9.70
25	9.79	9.94	9.55	9.90	9.70	9.43	9.10	9.09	8.87	9.24	9.48	9.65
EOM	9.86	9.88	9.63	9.92	9.74	9.36	9.06	8.99	8.91	9.28	9.58	9.64
LOW	9.86	9.99	9.89	9.93	9.98	9.82	9.37	9.24	9.01	9.28	9.60	9.74
HIGH	9.70	9.86	9.45	9.61	9.67	9.35	9.06	8.99	8.87	8.91	9.22	9.60

WTR YR 1984 HIGH 8.87 JUN 23 -27 LOW 9.99 NOV 26, 27

KOSCIUSKO COUNTY

412510085442801. Local number, KO 7.

LOCATION.--Lat 41°25'10", long 85°44'28", in SE¼NE¼NW¼ sec.8, T.34 N., R.7 E., Kosciusko County, Hydrologic Unit 04050001, 20 ft north of the intersection of Chicago Avenue and County Road 530 East in Syracuse.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2 in, depth 23.8 ft, cased to 20.8 ft, screened to 23.8 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 870 ft. Measuring point: Top of floor of shelter 2.90 ft above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.86 ft below land-surface datum, Mar. 16, 1982; lowest, 5.63 ft below land-surface datum, Sept. 18, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.39	5.17	4.38	4.25	4.60	4.55	---		---	4.68	4.77	5.09
10	5.42	5.22	4.13	4.39	4.63	4.69	---		---	4.77	4.50	4.94
15	5.28	5.09	3.44	4.54	3.80	4.41	---		4.44	4.83	4.78	4.95
20	5.33	5.00	3.85	4.67	3.99	3.91	---		4.44	4.91	4.90	5.02
25	5.09	4.94	4.02	4.75	4.20	3.84	---		4.27	4.87	5.01	4.63
EOM	5.19	4.56	4.18	4.81	4.37	3.99	---		4.56	4.93	5.10	4.74
LOW	5.45	5.25	4.60	4.83	4.86	4.75	4.08		4.60	4.99	5.12	5.13
HIGH	5.09	4.56	3.40	4.19	3.77	3.84	4.04		4.25	4.60	4.40	4.63

WTR YR 1984 HIGH 3.40 DEC 13,14 LOW 5.45 OCT 7,8

KOSCIUSKO COUNTY

412404085442501. Local number, KO 8.

LOCATION.--Lat 41°24'04", long 85°44'25", in SE¼SE¼NW¼ sec.17, T.34 N., R.7 E., Kosciusko County, Hydrologic Unit 04050001, 0.5 mi south of County Road 1200 North on west side of State Highway 13, and 1.7 mi south of Syracuse.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2 in, depth 27.8 ft, cased to 24 ft, screened to 27 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 863 ft. Measuring point: Top of floor of shelter 2.80 ft above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.90 ft below land-surface datum, Mar. 14, 1982; lowest, 6.30 ft below land-surface datum, Sept. 14-15, 18, 19, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.00	5.53	4.66	4.58	4.64	4.67	4.26	4.42	4.49	5.04	5.17	5.72
10	5.94	5.49	4.44	4.65	4.68	4.73	4.36	4.59	4.73	5.15	5.09	5.61
15	5.82	5.40	3.84	4.76	3.80	4.47	4.23	4.75	4.74	5.28	5.27	5.59
20	5.82	5.20	4.24	4.79	4.14	3.89	3.93	4.72	4.85	5.41	5.44	5.68
25	5.53	5.16	4.40	4.83	4.41	3.93	3.96	4.34	4.75	5.39	5.57	5.47
EOM	5.55	4.78	4.57	4.84	4.33	4.14	4.23	4.18	4.90	5.40	5.70	5.44
LOW	6.00	5.56	4.85	4.84	4.84	4.75	4.46	4.89	4.96	5.50	5.76	5.81
HIGH	5.53	4.78	3.83	4.57	3.76	3.87	3.92	4.15	4.26	4.96	5.03	5.43

WTR YR 1984 HIGH 3.76 FEB 14 LOW 6.00 OCT 4-6

KOSCIUSKO COUNTY

412556085513401. Local number, KO 9.

LOCATION.--Lat 41°25'56", long 85°51'34", in SW¼NE¼NW¼ sec.5, T.34 N., R.6 E., Kosciusko County, Hydrologic Unit 04050001, on the north edge of property owned by the Dome Pipeline Corporation, on County Road 50 West, 1.5 miles northwest of Milford.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 4 in, depth 102 ft, cased to 99 ft, screened to 102 ft.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 830.90 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 3.2 ft above land-surface datum.

PERIOD OF RECORD.--October 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.18 ft below land-surface datum, May 14, 1983; lowest, 13.82 ft below land-surface datum, Nov. 27,28, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.37	13.64	13.78	12.94	13.16	12.11	11.29	10.95	11.12	11.61	12.79	13.51
10	13.43	13.69	13.67	12.95	13.20	12.12	11.21	11.00	11.17	11.81	12.84	13.54
15	13.48	13.72	13.42	12.99	12.65	12.15	11.17	11.14	11.30	11.97	12.93	13.57
20	13.54	13.76	13.16	13.03	12.38	11.98	11.16	11.24	11.37	12.20	13.12	13.61
25	13.57	13.80	13.03	13.07	12.24	11.78	11.07	11.28	11.39	12.42	13.27	13.63
EOM	13.61	13.79	12.97	13.13	12.16	11.49	10.97	11.15	11.47	12.56	13.47	13.65
LOW	13.62	13.82	13.79	13.14	13.20	12.18	11.49	11.30	11.49	12.60	13.49	13.65
HIGH	13.34	13.62	12.97	12.94	12.16	11.49	10.97	10.94	11.12	11.49	12.61	13.49

WTR YR 1984 HIGH 10.94 MAY 3, 4 LOW 13.82 NOV 27, 28

LAGRANGE COUNTY

414318085200601. Local number, LG 2.

LOCATION.--Lat 41°43'18", long 85°20'06", in SW¼SE¼NE¼ sec. 26, T.38 N., R.10 E., Lagrange County, Hydrologic Unit 04050001, on northeast corner of intersection of State Highway 120 and County Road 475 East, and 1.2 mi west of Brighton.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 5 in, depth 86 ft, cased to 80 ft, screened to 86 ft.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 911.02 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 3.0 ft above land-surface datum.

PERIOD OF RECORD.--May 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.99 ft below land surface datum, Apr. 3, 1982; lowest, 16.03 ft below land surface datum, Aug. 31, 1984

HIGHEST WATER LEVEI, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.17	15.40	---	15.23	15.40	15.03	14.66	14.11	13.64		---	15.90
10	15.21	15.41	15.55	15.25	15.45	15.04	14.64	14.03	13.58		---	15.84
15	15.24	15.44	15.52	15.27	15.04	14.99	14.59	13.99	13.52		---	15.81
20	15.27	15.47	15.42	15.29	15.03	14.80	14.55	13.94	13.52		---	15.79
25	15.30	15.50	15.32	15.32	15.03	14.77	14.77	13.87	---		15.70	15.77
EOM	15.38	15.52	15.27	15.38	15.03	14.72	14.22	13.75	---		16.03	15.75
LOW	15.38	15.52	15.56	15.39	15.45	15.09	14.72	14.23	13.75		16.03	16.01
HIGH	15.16	15.38	15.27	15.23	15.01	14.72	14.22	13.75	13.50		15.68	15.75

WTR YR 1984 HIGH 13.50 JUN 17,18 LOW 16.03 AUG 31

LAGRANGE COUNTY

414158085253401. Local number, LG 3.

LOCATION.--Lat 41°41'58", long 85°25'34", in SE¼SE¼SE¼ sec.36, T.38 N., R.9 E., Lagrange County, Hydrologic Unit 04050001, at northwest corner of intersection of State Highway 9 and County Road 400 North, at edge of woods, and 1.4 mi south of Howe.
Owner: U.S. Geological Survey.

AQUIFER.--Fine to medium sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 40 ft, cased to 35 ft, screened to 40 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 870 ft. Measuring point: Top of floor of shelter 3.7 ft above land-surface datum.

PERIOD OF RECORD.--June 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.48 ft below land-surface datum, Mar. 21, 1982; lowest, 8.56 ft below land-surface datum, Nov. 27, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.35	8.49	8.41	7.91	7.93	7.55	6.86	6.38	6.33	7.19	7.96	8.45
10	8.40	8.52	8.28	7.97	7.42	7.28	6.59	6.53	6.52	7.35	8.02	8.40
15	8.42	8.54	7.94	8.02	7.33	7.00	---	6.67	6.55	7.48	8.06	8.22
20	8.45	8.55	7.82	8.06	7.34	6.75	6.40	6.80	6.73	7.62	8.14	8.20
25	8.44	8.55	7.79	8.12	7.41	6.72	6.21	6.53	6.87	7.70	8.26	8.11
EOM	8.47	8.41	7.85	8.11	7.47	6.77	6.19	6.16	7.02	7.88	8.40	7.99
LOW	8.48	8.56	8.41	8.13	8.13	7.60	6.89	6.82	7.05	7.90	8.42	8.47
HIGH	8.33	8.41	7.78	7.86	7.32	6.72	6.19	6.16	6.17	7.05	7.90	7.99

WTR YR 1984 HIGH 6.16 MAY 30, 31 LOW 8.56 NOV 27

LAKE COUNTY

411038087284701. Local number, LK 12.

LOCATION.--Lat 41°10'38", long 87°28'47", in SW¼NE¼SW¼ sec.32, T.32 N., R.9 W., Lake County, Hydrologic Unit 07120001, on the northern edge of Kankakee River State Park, 2.0 mi southwest of Schneider.
Owner: U.S. Geological Survey.

AQUIFER.--Dolomite of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 82 ft, cased to 52 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 630.59 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 1.55 ft above land-surface datum.

REMARKS.--Water level may be affected by pumping.

PERIOD OF RECORD.--March 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.15 ft below land-surface datum, Jan. 12, 1973; lowest, 16.41 ft below land-surface datum, Aug. 29, 1984.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.03	---	4.91	4.00	3.78	3.16	2.36	2.37	2.12	3.27	13.36	15.11
10	7.88	---	4.73	4.03	3.74	3.20	2.50	2.46	2.32	5.38	14.12	14.21
15	---	---	4.22	3.99	3.37	3.19	2.45	2.65	2.51	7.82	14.61	13.22
20	---	5.63	4.11	4.04	3.10	2.56	2.46	2.67	2.61	9.88	15.64	12.15
25	---	5.53	4.05	3.91	3.13	2.30	2.20	2.19	2.69	11.47	15.62	11.41
EOM	---	5.16	4.08	3.93	3.17	2.30	2.15	1.95	2.81	12.02	16.06	10.73
LOW	8.63	5.79	5.38	4.41	4.15	3.59	2.89	3.27	3.14	12.26	16.41	16.24
HIGH	7.88	5.16	4.01	3.86	3.05	2.17	2.15	1.95	1.95	2.87	12.20	10.73

WTR YR 1984 HIGH 1.95 MAY 30-JUN 1 LOW 16.41 AUG 29

LA PORTE COUNTY

413700086445401. Local number, LP 8.

LOCATION.--Lat 41°37'00", long 86°44'54", in NE¼SE¼NW¼ sec.34, T.37 N., R.3 W., La Porte County, Hydrologic Unit 07120001, at the west end of Soldiers Memorial Park in La Porte.
Owner: State of Indiana.

AQUIFER.--Sand and Gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 3.0 in, depth 22 ft, cased to 20 ft, screened to 22 ft. Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 802.79 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.60 ft above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.84 ft below land-surface datum, May 24, 25, 1983; lowest, 7.04 ft below land-surface datum, Mar. 8-11, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.09	4.28	3.97	4.25	4.28	4.05	3.73	3.56	3.66	3.90	4.22	4.83
10	4.18	4.31	4.36	4.35	4.08	4.09	3.84	3.66	3.62	4.03	3.97	4.62
15	4.25	4.36	4.17	4.32	3.97	3.32	3.60	3.77	3.84	4.06	4.47	4.39
20	4.16	4.20	4.35	4.37	4.07	3.38	3.72	3.24	3.93	4.19	4.57	4.86
25	4.23	4.30	4.35	4.34	4.08	3.76	3.56	3.16	3.61	4.32	4.71	4.58
EOM	4.31	4.30	4.36	4.38	4.10	3.87	3.48	3.55	3.78	4.39	4.84	4.89
LOW	4.37	4.40	4.42	4.44	4.38	4.21	3.87	3.84	3.99	4.41	4.87	4.98
HIGH	3.82	3.49	3.52	4.25	3.15	3.32	2.99	2.94	3.14	3.55	3.85	4.39

WTR YR 1984 HIGH 2.94 MAY 22 LOW 4.98 SEP 22, 23

LA PORTE COUNTY

412350086512801. Local number, LP 9.

LOCATION.--Lat 41°23'50", long 86°51'28", in SE¼SW¼NE¼ sec.15, T.34 N., R.4 W., La Porte County, Hydrologic Unit 07120001, at the intersection of County Roads 1450 South and 825 West, 3.0 mi southeast of Wanatah.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well. diameter 6 in, depth 32 ft, cased to 27 ft, screened to 32 ft. Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 706.81 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 1.60 ft above land-surface datum.

PERIOD OF RECORD.--June 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.60 ft below land-surface datum, Apr. 3, 1982; lowest, 8.01 ft below land-surface datum, Dec. 6, 7, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.86	7.29	6.91	6.21	6.79	5.31	3.99	4.13	3.73	5.29	6.59	7.39
10	6.97	7.33	6.75	6.40	6.82	5.53	4.41	4.19	4.12	5.58	6.72	7.46
15	7.04	7.38	6.17	6.51	5.30	5.16	3.98	4.20	4.42	5.80	6.83	7.53
20	7.11	7.41	5.98	6.59	5.03	4.13	4.09	4.15	4.66	6.02	6.98	7.58
25	7.17	7.44	5.98	6.67	5.10	3.76	3.49	2.94	4.87	6.27	7.13	7.64
EOM	7.24	7.03	6.15	6.78	5.20	4.07	3.55	3.31	5.05	6.47	7.29	7.69
LOW	7.25	7.46	7.03	6.79	6.83	5.72	4.51	4.81	5.12	6.50	7.31	7.70
HIGH	6.81	7.03	5.95	6.17	5.00	3.70	3.01	2.92	3.40	5.12	6.50	7.31

WTR YR 1984 HIGH 2.92 MAY 26 LOW 7.70 SEP 30

LA PORTE COUNTY

413139086341401. Local number, LP 10.

LOCATION.--Lat 41°31'40", long 86°34'10", in SE¼SW¼NE¼ sec. 31, T.36 N., R.1 W., La Porte County, Hydrologic Unit 07120001, 200 ft north of the Mixsawbah Fish Hatchery Manager's residence and 2.6 mi southeast of Stillwell. Owner: State of Indiana.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 104 ft, cased to 102 ft, screened to 104 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 695 ft. Measuring point: Top of floor of shelter 3.60 ft above land-surface datum.

PERIOD OF RECORD.--August 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.95 ft below land surface datum, Mar 16, 1982; lowest, 9.16 ft below land surface datum, Aug 13, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.07	9.08	8.80	8.48	8.58	7.47	6.65	6.87	6.64	7.54	8.47	9.03
10	9.11	9.10	8.73	8.57	8.54	7.62	7.13	7.16	7.08	7.79	8.58	9.01
15	9.12	9.12	8.48	8.58	7.57	7.50	6.87	7.47	7.43	7.90	8.66	9.04
20	9.14	9.06	8.43	8.64	7.32	6.41	6.66	7.55	7.65	8.08	8.74	9.06
25	9.06	9.03	8.44	8.68	7.38	6.06	5.38	5.60	6.72	8.23	8.85	9.10
EOM	9.11	8.87	8.49	8.71	7.42	6.72	6.10	5.39	7.24	8.36	8.97	9.12
LOW	9.14	9.12	8.87	8.72	8.72	7.79	7.19	7.63	7.75	8.38	8.99	9.13
HIGH	9.03	8.87	8.41	8.48	7.29	6.04	4.85	4.57	5.73	7.32	8.38	8.99

WTR YR 1984 HIGH 4.57 MAY 26 LOW 9.14 SEP 18-21

LA PORTE COUNTY

412839086533101. Local number, LP 11.

LOCATION.--Lat 41°28'39", long 86°53'31", in SW¼SW¼SW¼ sec.16, T.35 N., R.4 W., La Porte County, Hydrologic Unit 07120001, in the northeast corner of intersection of U.S. Highway 421 and County Road 900 South. Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 100 ft, cased to 95 ft, screened to 100 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 760 ft. Measuring point: Top of recorder shelf 4.1 ft above land-surface datum.

REMARKS.--Water level may be affected by pumpage.

PERIOD OF RECORD.--June 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.52 ft below land-surface datum, July 2, 1983; lowest, 9.11 ft below land surface datum, Nov. 13, 1982.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.88	7.70	7.30	6.56	7.49	6.06	5.08		---	4.58	5.66	6.76
10	7.04	7.76	7.09	6.84	7.65	6.26	5.18		---	4.80	5.86	6.80
15	7.20	7.90	6.32	6.94	6.08	6.30	5.19		4.50	4.84	6.04	7.03
20	7.33	7.89	6.22	7.10	5.94	5.71	5.11		4.46	5.05	6.07	7.14
25	7.45	8.09	6.29	7.21	5.95	5.47	4.64		4.05	5.26	6.32	7.33
EOM	7.61	7.69	6.54	7.43	5.99	5.18	---		4.35	5.47	6.56	7.53
LOW	7.63	8.17	7.68	7.46	7.72	6.47	5.22		4.54	5.51	6.62	7.56
HIGH	6.79	7.62	6.17	6.54	5.90	5.16	4.63		3.99	4.40	5.51	6.59

WTR YR 1984 HIGH 3.99 JUN 24 LOW 8.17 NOV 26, 27

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LA PORTE COUNTY

413434086434701. Local number, LP 12.

LOCATION.--Lat 41°34'34", long 86°43'47", in NE¼NE¼NW¼ sec.14, T.36 N., R.3 W., La Porte County, Hydrologic Unit 07120001, on County Road 150 West, at La Porte Municipal Airport, 1.6 mi south of La Porte. Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 77 ft, cased to 71 ft, screened to 77 ft. Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 805 ft. Measuring point: Top of recorder shelf 3.70 ft above land-surface datum.

REMARKS.--Water level may be affected by pumpage.

PERIOD OF RECORD.--July 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.59 ft below land-surface datum, May 29, 30, 31, 1983, lowest, 20.46 ft below land surface datum, Feb. 15,16, 1984.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.37		19.52	19.89	20.32	20.23	20.03	19.59	---	18.22	18.61	19.18
10	18.47		19.62	19.99	20.40	20.21	19.99	19.40	---	18.16	18.74	19.22
15	---		19.66	20.07	20.45	20.19	19.89	19.32	---	18.15	18.80	19.29
20	---		19.77	20.12	20.39	20.17	19.85	19.23	18.68	18.19	18.87	19.35
25	---		19.81	20.17	20.32	20.20	19.78	19.14	18.51	18.36	19.02	19.43
EOM	---		19.89	20.27	20.27	20.15	19.66	---	18.34	18.49	19.08	19.52
LOW	18.49		19.90	20.28	20.46	20.28	20.15	19.72	18.68	18.52	19.11	19.53
HIGH	18.32		19.52	19.89	20.27	20.14	19.66	19.14	18.34	18.15	18.52	19.10

WTR YR 1984 HIGH 18.15 JUL 11-18 LOW 20.46 FEB 15, 16

MARION COUNTY

395218086082701. Local number, MA 32.

LOCATION.--Lat 39°52'18", long 86°08'27", in NE¼SW¼SW¼ sec.36, T.17 N., R.3 E., Marion County, Hydrologic Unit 05120201, at Indianapolis Water Company station on Westfield Boulevard in Broad Ripple, City of Indianapolis. Owner: Indianapolis Water Company.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 10 in, depth 308 ft, cased to 60 ft, open end. Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 719.78 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 3.15 ft above land-surface datum.

REMARKS.--Water level affected by earthquakes.

PERIOD OF RECORD.--May 1958 to August 1971. January 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.85 ft below land-surface datum, June 17, 1958; lowest, 15.15 ft below land-surface datum, Oct. 5, 1965.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.13	10.29	9.54	9.57	9.45	9.35	8.79	9.06		9.74	9.96	10.07
10	10.59	10.11	9.52	9.72	9.55	9.32	9.03	---		9.83	9.99	10.07
15	10.48	10.01	8.91	9.76	9.06	9.26	9.13	---		9.97	10.07	10.11
20	10.37	9.93	9.28	9.86	9.24	8.05	9.10	---		10.04	10.17	10.14
25	10.18	9.83	9.45	9.83	9.38	8.16	8.54	---		10.07	10.15	9.95
EOM	10.30	9.64	9.57	9.85	9.36	8.61	8.86	---		10.03	10.16	10.00
LOW	12.21	10.57	9.81	9.94	9.89	9.48	9.13	9.39		10.73	10.88	10.70
HIGH	10.18	9.63	8.75	9.57	9.02	7.90	8.53	8.99		9.71	9.92	9.89

WTR YR 1984 HIGH 7.90 MAR 22 LOW 12.21 OCT 4

MARION COUNTY

395259086030101. Local number, MA 33.

LOCATION.--Lat 39°52'59", long 86°03'01", in NW¼NW¼NW¼ sec. 35, T.17 N., R.4 E., Marion County, Hydrologic Unit 05120201, in the northwest corner of Skiles Test Elementary School property, 150 ft south of the intersection of Johnson Road and East 71st Street, 0.3 mi west of Shadeland Avenue, and 1.5 mi south of Castleton.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 94 ft, cased to 89 ft, screened to 94 ft.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 812.20 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 3.90 ft above land-surface datum.

PERIOD OF RECORD.--May 12, 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 71.75 ft below land-surface datum, Apr. 15, 1980; lowest, 75.29 ft below land-surface datum, Dec. 17, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	74.27	74.65	74.42	73.81	74.03	74.09	73.51	73.69	73.66	73.90	74.15	74.62
10	74.77	74.07	74.95	74.55	74.31	74.31	74.01	73.70	73.68	73.94	74.12	74.27
15	74.89	74.34	74.17	74.50	74.47	73.95	73.61	74.08	73.91	74.07	74.35	74.47
20	74.77	74.06	74.85	74.60	74.29	73.45	74.13	73.52	73.85	74.28	74.33	74.16
25	74.76	74.79	74.67	74.06	74.12	73.73	73.74	73.28	73.94	74.35	74.59	74.30
EOM	74.96	74.91	74.86	74.46	74.17	74.24	73.39	73.68	73.96	74.16	74.40	74.52
LOW	75.25	75.13	75.29	74.98	75.09	74.81	74.31	74.25	74.02	74.50	74.69	74.90
HIGH	74.27	74.06	73.89	73.80	73.84	73.24	73.39	73.18	73.59	73.90	73.94	74.16

WTR YR 1984 HIGH 73.18 MAY 3, 4 LOW 75.29 DEC 17

MARTIN COUNTY

383659086545901. Local number, MT 5.

LOCATION.--Lat 38°36'59", long 86°54'59", in SE¼NE¼SW¼ sec.12, T.2 N., R.5 W., Martin County, Hydrologic Unit 05120208, on private property 0.25 mi southwest of Whitefield.
Owner: Joseph Arvin.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 143 ft, cased to 53 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 565 ft. Measuring point: Top of floor of shelter 2.8 ft above land-surface datum.

PERIOD OF RECORD.--May 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 23.91 ft below land-surface datum, Apr. 14, 1980; lowest, 34.10 ft below land-surface datum, Jan. 1, 5, 22, 23, 1960, and Dec. 18, 19, 1964.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.51	27.41	27.11	26.90	26.73	26.84	26.16	26.05	25.83	25.76	26.30	26.89
10	27.08	26.88	27.55	27.31	27.10	27.14	26.50	26.03	25.88	25.90	26.26	26.69
15	27.19	27.00	27.02	27.39	27.10	26.82	26.14	26.34	25.99	26.01	26.50	26.96
20	27.14	26.72	27.70	27.60	27.05	26.40	26.48	25.82	25.90	26.16	26.42	26.88
25	27.25	27.35	27.70	27.09	26.90	26.44	26.12	25.69	25.87	26.27	26.70	26.99
EOM	27.55	27.50	27.82	27.22	26.93	26.89	25.95	25.98	25.83	26.29	26.62	27.30
LOW	27.73	27.70	28.03	27.82	27.51	27.46	26.95	26.51	26.06	26.47	26.83	27.48
HIGH	26.51	26.72	26.74	26.69	26.53	25.91	25.95	25.62	25.68	25.76	26.13	26.61

WTR YR 1984 HIGH 25.62 MAY 3, 4 LOW 28.03 DEC 30

MONTGOMERY COUNTY

400247086482101. Local number, MY 7.

LOCATION.--Lat 40°02'47", long 86°48'21", in NE¼NW¼SW¼ sec.31, T.19 N., R.3 W., Montgomery County, Hydrologic Unit 05120110, on the county right of way at the intersection of State Highway 32 and County Road 525 East, and 4.5 mi east of Crawfordsville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 111 ft, cased to 107 ft, screened to 109 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 801 ft. Measuring point: Top of floor of shelter 2.38 ft above land-surface datum.

PERIOD OF RECORD.--July 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 26.10 ft below land-surface datum, Apr. 13, 1974; lowest, 32.06 ft below land-surface datum, June 4, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.53	30.38	29.86	---	29.05	28.43	27.17	26.83	27.92	28.74	29.55	30.14
10	30.71	30.10	29.77	---	29.15	28.56	27.30	26.93	28.13	28.89	29.55	30.18
15	30.67	30.09	29.20	---	28.96	28.57	27.21	27.16	28.33	29.04	29.70	30.26
20	30.58	29.96	---	---	28.65	28.15	27.36	27.27	28.45	29.23	29.96	30.28
25	30.44	30.14	---	28.91	28.51	27.85	27.13	27.43	28.67	29.39	30.00	30.32
EOM	30.44	30.10	---	29.11	28.36	27.57	26.91	27.67	28.79	29.45	29.98	30.46
LOW	30.81	30.99	30.19	29.15	29.33	28.70	27.58	27.71	28.86	29.49	30.07	30.57
HIGH	30.36	29.96	29.20	28.91	28.31	27.50	26.91	26.75	27.68	28.74	29.46	30.03

WTR YR 1984 HIGH 26.75 MAY 4 LOW 30.99 NOV 1

MORGAN COUNTY

393423086161001. Local number, MG 4.

LOCATION.--Lat 39°34'23", long 86°16'10", in NW¼NW¼NW¼ sec.13, T.13 N., R.2 E., Morgan County, Hydrologic Unit 05120201, on east side of County Road 850 East, 0.4 mi north of County Road 950 North, and 1.1 mi north of Waverly.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 60 ft, cased to 56 ft, screened to 60 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 645 ft from topographic map. Measuring point: Top of floor of shelter 2.90 ft above land-surface datum.

PERIOD OF RECORD.--May 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.09 ft below land-surface datum, Apr. 9, 1982; lowest, 15.65 ft below land-surface datum, Nov. 9, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.38	15.59	14.80	---	13.66	12.86	10.01	9.81	10.60	11.99	13.20	14.02
10	15.46	15.63	14.48	13.22	13.74	12.74	9.98	10.07	10.82	12.13	13.32	14.14
15	15.50	15.52	13.54	13.36	13.33	12.63	10.13	10.30	11.02	12.34	13.41	14.25
20	15.53	15.48	13.07	13.50	13.15	11.03	10.18	10.48	11.26	12.59	13.53	14.40
25	15.50	15.38	13.03	13.64	13.03	10.16	9.48	10.31	11.50	12.78	13.73	14.50
EOM	15.55	15.10	---	13.75	12.94	10.02	9.52	10.43	11.81	12.99	13.91	14.62
LOW	15.57	15.65	15.10	13.77	13.80	12.94	10.23	10.51	11.85	13.05	13.93	14.63
HIGH	15.26	15.10	12.99	13.22	12.94	9.94	9.47	9.63	10.45	11.85	13.05	13.93

WTR YR 1984 HIGH 9.47 APR 26, 27 LOW 15.65 NOV 9

GROUND-WATER LEVELS

NEWTON COUNTY

405105087173301. Local number, NE 6.

LOCATION.--Lat 40°51'05", long 87°17'33", in SE¼SW¼SE¼ sec.23, T.28 N., R.8 W., Newton County, Hydrologic Unit 07120002, on the right of way of County Road 1000 South, 1.0 mi south of Foresman.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 80 ft, cased to 76 ft, screened to 78 ft.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 654.10 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.15 ft above land-surface datum.

PERIOD OF RECORD.--May 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.94 ft below land-surface datum, Mar. 20, 21, 1982; lowest, 16.81 ft below land-surface datum, Sept. 30, 1984.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.46	16.61	15.95	13.01	13.08	11.35	10.02	10.92	10.04	12.72	14.17	16.00
10	16.60	16.54	15.43	13.12	13.09	11.67	10.49	11.11	10.81	13.02	14.46	16.14
15	16.76	16.53	14.15	13.15	11.29	11.75	10.71	11.41	11.34	13.26	14.88	16.35
20	16.78	16.43	13.53	13.22	10.72	10.35	10.89	11.34	11.78	13.57	15.10	16.53
25	16.61	16.52	13.24	13.20	10.87	9.55	10.51	10.23	12.14	13.71	15.44	16.67
EOM	16.62	16.26	13.18	13.26	11.12	9.69	10.52	9.27	12.45	13.94	15.67	16.80
LOW	16.82	16.65	16.26	13.31	13.28	11.91	10.95	11.61	12.51	14.03	15.78	16.81
HIGH	16.40	16.26	13.08	13.01	10.70	9.21	9.79	9.21	9.37	12.50	13.97	15.75

WTR YR 1984 HIGH 9.21 MAR 28, MAY 30 LOW 16.81 SEP 30

NEWTON COUNTY

405959087282901. Local number, NE 7.

LOCATION.--Lat 40°59'59", long 87°28'29", in SE¼SW¼SE¼ sec.32, T.30 N., R.9 W., Newton County, Hydrologic Unit 07120002, in the Willow Slough Game Preserve, 2.0 mi southwest of Enos.
Owner: State of Indiana.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 150 ft, cased to 136 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 680.83 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.03 ft above land-surface datum.

PERIOD OF RECORD.--February 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 34.65 ft below land-surface datum, Apr 14, 1980; lowest, 82.28 ft below land-surface datum, Aug. 26, 1984.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	56.23	50.71	46.81	44.17	42.44	41.27	39.99	39.16	38.53	39.86	71.53	80.95
10	55.16	49.79	46.44	44.13	42.29	41.15	39.99	39.02	38.43	44.70	75.56	80.03
15	54.22	49.17	45.76	43.82	42.14	40.79	39.65	39.16	38.74	49.94	79.12	78.15
20	53.37	48.39	45.63	43.61	41.86	40.41	39.68	38.84	38.72	56.21	81.10	75.63
25	52.42	48.00	45.15	43.12	41.72	40.38	39.41	38.62	38.68	63.42	81.84	73.60
EOM	51.54	47.48	44.78	42.81	41.55	40.27	39.18	38.60	38.90	68.15	81.63	71.62
LOW	57.62	51.52	47.53	44.84	42.85	41.59	40.33	39.43	38.98	68.45	82.28	81.64
HIGH	51.54	47.47	44.77	42.75	41.47	40.14	39.18	38.60	38.42	38.97	68.49	71.62

WTR YR 1984 HIGH 38.42 JUN 9 LOW 82.28 AUG 26

NEWTON COUNTY

410428087231501. Local number, NE 8.

LOCATION.--Lat 41°04'28", long 87°25'44", in NW¼SW¼SW¼ sec.2, T.30 N., R.9 W., Newton County, Hydrologic Unit 07120001, in the Beaver Lake Prairie Chicken Refuge, 3.0 mi north of Enos.
Owner: State of Indiana.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 150 ft, cased to 97 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 663.34 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.83 ft above land-surface datum.

REMARKS.--Water level may be affected by irrigation pumpage.

PERIOD OF RECORD.--February 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.04 ft below land-surface datum, May 31, 1976; lowest, 84.78 ft below land-surface datum, Aug. 17, 1984.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.23	24.74	19.54	16.14	13.83	12.17	10.48	9.27	8.23	36.52	---	54.01
10	36.02	23.52	19.03	15.97	13.58	11.95	10.36	9.25	8.64	44.49	76.91	50.09
15	35.76	22.65	18.24	15.55	13.32	11.55	9.96	9.19	8.35	58.23	79.39	46.08
20	29.92	21.66	17.94	15.24	12.99	11.08	9.94	8.77	8.21	70.29	64.78	42.74
25	27.71	21.01	17.34	14.68	12.78	10.99	9.59	8.48	8.61	64.09	70.35	40.24
EOM	25.97	20.35	16.84	14.25	12.48	10.78	9.34	8.34	22.17	57.30	55.76	37.99
LOW	38.87	25.95	20.37	16.88	14.29	12.53	10.82	9.55	25.14	81.85	84.78	55.75
HIGH	25.97	20.35	16.84	14.24	12.48	10.70	9.34	8.34	8.14	25.16	55.76	37.99

WTR YR 1984 HIGH 8.14 JUN 8 LOW 84.78 AUG 17

NEWTON COUNTY

405959087282902. Local number, NE 9.

LOCATION.--Lat 40°59'59", long 87°28'29", in SE¼SW¼SE¼ sec.32, T.30 N., R.9 W., Newton County, Hydrologic Unit 07120002, in the Willow Slough Game Preserve, 2.0 mi southwest of Enos.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2 in, depth 45 ft, cased to 42 ft, screened to 45 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 681 ft from topographic map. Measuring point: Top of "Y" in well casing 3.10 ft above land-surface datum.

PERIOD OF RECORD.--May 1978 to current year. Fragmentary record prior to March 1981.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.07 ft below land-surface datum, May 3, 1978; lowest, 14.34 ft below land-surface datum, Oct. 18-22, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.06	14.13	12.98	---	12.18	10.95	9.18	9.02	9.15	10.73	12.31	13.48
10	14.15	14.14	12.76	---	12.19	11.00	9.37	9.21	9.29	11.04	12.54	13.61
15	14.24	14.10	12.16	---	11.37	10.95	9.27	9.46	9.63	11.32	12.78	13.73
20	14.34	13.98	12.08	11.98	11.03	9.96	9.17	9.24	10.00	11.71	12.96	13.87
25	14.21	13.86	---	12.03	10.96	9.40	8.93	8.79	10.13	11.92	13.14	13.91
EOM	14.16	13.37	---	12.11	10.95	9.22	9.00	8.71	10.44	12.13	13.31	14.00
LOW	14.34	14.16	13.37	12.12	12.19	11.07	9.49	9.74	10.48	12.16	13.36	14.02
HIGH	14.01	13.37	12.08	11.91	10.95	9.19	8.93	8.67	8.78	10.48	12.16	13.37

WTR YR 1984 HIGH 8.67 MAY 29-31 LOW 14.34 OCT 18-22

NEWTON COUNTY

410428087231502. Local number, NE 10.

LOCATION.--Lat 41°04'28", long 87°25'44", in NW¼SW¼SW¼, sec.2, T.30 N., R.9 W., Newton County, Hydrologic Unit 07120001, in the Beaver Lake Prairie Chicken Refuge, 3.0 mi north of Enos.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2 in., depth 45 ft, cased to 41 ft, screened to 44 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 663 ft from topographic map. Measuring point: Top of "Y" in well casing 2.65 ft above land-surface datum.

PERIOD OF RECORD.--May 1978 to current year. Fragmentary record prior to March 1981.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.03 ft below land-surface datum, Mar. 16, 1982; lowest, 6.30 ft below land-surface datum, Sept. 30, 1984.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.11	5.87	4.95	4.76	5.33	4.07	2.46	3.20	2.88	4.44	5.26	5.96
10	6.16	5.92	4.77	4.86	5.33	4.19	2.94	3.49	2.94	4.66	5.42	6.06
15	6.24	5.75	4.08	4.96	3.75	4.13	2.98	3.73	3.25	4.81	5.57	6.09
20	6.28	5.68	4.04	5.12	3.60	2.68	2.83	3.15	3.69	4.98	5.68	6.21
25	5.91	5.60	4.34	5.19	3.66	2.08	2.46	2.06	3.94	5.10	5.80	6.23
EOM	5.84	5.00	4.65	5.27	3.88	2.43	2.98	2.18	4.21	5.14	5.90	6.28
LOW	6.28	5.92	5.00	5.28	5.33	4.28	3.15	3.92	4.23	5.17	5.92	6.30
HIGH	5.84	5.00	4.03	4.68	3.60	2.02	2.45	1.82	2.40	4.23	5.18	5.92

WTR YR 1984 HIGH 1.82 MAY 28,29 LOW 6.30 SEP 30

NEWTON COUNTY

410235087305901. Local number, NE 11.

LOCATION.--Lat 41°02'35", long 87°30'59", in SW¼SW¼SE¼, sec.13, T.30 N., R.10 W., Newton County, Hydrologic Unit 07120001, on right of way of County Road 300 North, 0.5 mi west of County Road 600 West, and 4.0 mi norhtwest of Enos.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in, depth of 150 ft, cased to 90 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 760 ft from topographic map. Measuring point: Top of casing 3.30 ft above land-surface datum.

PERIOD OF RECORD.--Oct. 16, 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 22.78 ft below land-surface datum, May 6, 1982; lowest recorded, 73.22 ft below land-surface datum, Aug. 8,18,21, Sept. 1, 1984.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	37.12	33.37	30.62	28.81	27.54	26.19	25.31	24.68	25.50	64.00	69.88
10	41.94	36.21	33.08	30.73	28.66	27.44	26.21	25.17	24.60	35.46	---	68.03
15	41.85	35.65	32.31	30.36	28.51	27.01	25.81	25.36	24.78	47.70	---	66.04
20	39.86	34.73	32.28	30.10	28.20	26.60	25.94	24.97	24.77	54.94	71.04	63.23
25	38.92	34.50	31.75	29.51	28.05	26.62	25.56	24.75	24.67	61.33	---	60.97
EOM	37.96	34.08	31.39	29.17	27.83	26.58	25.19	24.75	25.00	59.85	---	58.78
LOW	42.75	38.01	34.17	31.52	29.24	27.98	26.69	25.71	25.20	66.51	73.22	73.22
HIGH	37.96	33.94	31.31	29.11	27.75	26.34	25.19	24.75	24.48	25.01	63.56	58.78

WTR YR 1984 HIGH 24.48 JUN 27 LOW 73.22 AUG 8, 18, 21, SEP 1

NEWTON COUNTY

410830087305601. Local number, NE 12.

LOCATION.--Lat 41°08'17", long 87°30'56", in SW¼SW¼NE¼ sec.13, T.31 N., R.10 W., Newton County, Hydrologic Unit 07120001, along ditch on the east side of County Road 650 West, 130 feet north of County Road 950 North, 1.0 mi south of State Highway 10, and 3.5 miles west of Lake Village.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in, depth 150 ft, cased to 64 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 805 ft from topographic map. Measuring point: Top of casing 3.30 ft above land-surface datum.

REMARKS.--Water level may be affected by pumpage.

PERIOD OF RECORD.--Oct. 16, 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.25 ft above land-surface datum, Apr. 16, 17, 1982; lowest, 21.55 ft below land-surface datum, Aug. 18, 19, 1984.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.41	6.20	4.38	2.80	2.12	1.46	.77	.42	.38	4.84	17.68	20.06
10	8.01	5.79	4.12	2.74	2.07	1.42	.77	.43	.37	7.62	18.95	17.79
15	7.59	5.55	3.73	2.61	1.99	1.30	.68	.45	.37	7.99	19.50	16.34
20	7.33	5.21	3.54	2.49	1.80	1.13	.67	.53	.37	12.36	21.43	15.27
25	6.92	5.01	3.25	2.36	1.68	.99	.53	.44	.47	15.42	20.16	14.57
EOM	6.53	4.69	3.05	2.21	1.52	.89	.46	.39	1.51	13.67	19.64	13.93
LOW	8.89	6.53	4.69	3.05	2.21	1.52	.89	.54	1.96	15.87	21.55	20.41
HIGH	6.53	4.69	3.05	2.21	1.52	.87	.46	.39	.37	1.97	14.12	13.93

WTR YR 1984 HIGH .37 JUN 9, 10, 15-20 LOW 21.55 AUG 18, 19

NEWTON COUNTY

405853087172401. Local number, NE 13.

LOCATION.--Lat 40°58'53", long 87°17'24", in SW¼NE¼NW¼ sec.12, T.29 N., R.8 W., Newton County, Hydrologic Unit 07120002, on the Richard Smart property, 60 ft east of County Road 525 East, 900 ft south of County Road 100 South, and 2.0 mi north of Mount Ayr.
Owner: Prudential Insurance Company of America.

AQUIFER.--Dolomite of Silurian/Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in, depth 130 ft, cased to 71 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 676 ft. Measuring point: Top of casing 3.9 ft above land-surface datum.

REMARKS.--Water level may be affected by pumpage.

PERIOD OF RECORD.--May 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.39 ft above land-surface datum, May 6, 1982; lowest, 29.36 ft below land-surface datum, Aug. 4, 1984.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.00	9.94	7.16	4.70	3.70	2.76	1.76	1.51	1.38	10.57	28.87	23.69
10	13.89	9.24	6.95	4.90	3.65	2.72	1.87	1.48	1.41	14.77	25.75	23.89
15	13.22	8.82	6.20	4.64	3.56	2.45	1.58	1.74	1.56	19.70	24.67	21.55
20	12.22	8.12	6.12	4.55	3.29	2.12	1.78	1.48	1.66	24.20	27.74	19.25
25	11.38	8.06	5.65	4.12	3.20	2.13	1.52	1.31	1.78	26.55	26.87	17.74
EOM	10.58	7.73	5.35	4.00	3.03	2.12	1.27	1.32	4.73	26.37	23.65	16.37
LOW	16.33	10.61	7.82	5.48	4.12	3.18	2.22	1.91	5.98	27.80	29.36	24.74
HIGH	10.58	7.58	5.25	3.81	2.89	1.83	1.27	1.31	1.27	6.04	23.65	16.37

WTR YR 1984 HIGH 1.27 APR 30, JUN 1 LOW 29.36 AUG 4

NOBLE COUNTY

411922085221801. Local number, NO 8.

LOCATION.--Lat 41°19'22", long 85°22'18", in SE¼SW¼SE¼ sec.9, T.33 N., R.10 E., Noble County, Hydrologic Unit 04050001, near the east edge of Chain O' Lakes State Park, and 5.0 mi south of Albion.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 149 ft, cased to 146 ft, screened to 148 ft. Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 928 ft. Measuring point: Top of floor of shelter 2.65 ft above land-surface datum.

PERIOD OF RECORD.--December 1966 to September 1971. August 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 28.55 ft below land-surface datum, May 31, 1982; lowest, 32.49 ft below land-surface datum, Jan. 18, 1967.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.61	---	30.09	29.80	30.07	29.96	29.52	29.40	29.17	29.17	29.47	29.81
10	29.90	29.73	30.38	30.26	30.21	30.05	29.84	29.39	29.17	29.20	29.50	29.61
15	29.99	29.88	29.86	30.25	30.34	29.83	29.48	29.59	29.31	29.34	29.62	29.79
20	30.01	29.74	30.38	30.28	30.13	29.63	29.80	29.25	29.22	29.47	29.67	29.63
25	29.82	30.14	30.18	29.99	30.07	29.90	29.49	29.06	29.19	29.47	29.75	29.69
EOM	---	30.21	30.35	30.33	30.03	30.04	29.19	29.25	29.26	29.46	29.67	29.89
LOW	30.13	30.37	30.55	30.51	30.66	30.39	30.12	29.71	29.39	29.62	29.81	30.11
HIGH	29.57	29.73	29.72	29.80	29.92	29.50	29.19	29.06	28.97	29.17	29.34	29.60

WTR YR 1984 HIGH 28.97 JUN 27 LOW 30.66 FEB 7,8

NOBLE COUNTY

413106085232701. Local number, NO 9.

LOCATION.--Lat 41°31'06", long 85°23'27", in NW¼NE¼SE¼ sec.5, T.35 N., R.10 E., Noble County, Hydrologic Unit 04050001, at the intersection of County Roads 175 East and 1150 North, and 2.0 mi west of Wolcottville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 44 ft, cased to 39 ft, screened to 42 ft. Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 930 ft. Measuring point: Top of floor of shelter 2.60 ft above land-surface datum.

PERIOD OF RECORD.--June 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.53 ft below land-surface datum, Mar. 20, 1982; lowest, 17.55 ft below land-surface datum, Dec. 27, 28, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.23	16.63	16.00	14.28	14.90	13.00	11.03	11.37	11.40	13.50	14.56	15.42
10	16.35	16.60	15.30	14.64	14.84	13.37	11.23	11.74	11.97	13.74	14.70	15.47
15	16.50	16.69	13.49	14.73	12.33	13.49	11.26	12.17	12.36	14.01	14.45	15.59
20	16.54	16.47	13.78	14.86	12.23	11.05	10.50	12.35	12.68	14.29	14.78	15.60
25	16.58	16.52	14.06	14.80	12.53	10.72	10.19	12.00	12.97	14.40	15.02	15.59
EOM	16.60	16.18	14.42	15.15	12.74	11.05	10.60	10.79	13.33	14.55	15.23	15.21
LOW	16.69	16.81	16.19	15.21	15.18	13.75	11.46	12.39	13.36	14.59	15.29	15.84
HIGH	16.14	16.18	13.48	14.28	12.12	10.61	10.11	10.71	10.89	13.36	14.36	15.15

WTR YR 1984 HIGH 10.11 APR 23, 24 LOW 16.81 NOV 12

NOBLE COUNTY

412948085223401. Local number, NO 10.

LOCATION.--Lat 41°29'48", long 85°22'34", in SW¼SW¼SE¼ sec.9, T.35 N., R.10 E., Noble County, Hydrologic Unit 04050001, on the east side of West Lakes Marina in Rome City.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2 in, depth 24 ft, cased to 21 ft, screened to 24 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 920 ft. Measuring point: Top of floor of shelter 3.0 ft above land-surface datum.

PERIOD OF RECORD.--Nov. 2, 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.60 ft below land-surface datum, June 16, 1981; lowest, 12.74 ft below land-surface datum, Dec. 29, 1978, Feb 17, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.80	7.19	9.98	10.49	11.88	10.35	8.49	6.00	---	6.34	6.07	10.76
10	6.86	7.80	10.05	10.83	11.95	10.55	8.04	6.20	---	6.37	6.02	11.20
15	6.77	8.37	9.70	11.11	11.26	10.61	7.41	6.41	---	6.37	6.32	11.47
20	6.82	8.74	9.68	11.38	10.46	9.30	6.44	6.36	6.11	6.45	7.29	11.76
25	6.67	9.11	9.93	11.58	10.25	8.26	5.86	---	6.18	6.35	8.62	11.68
EOM	6.85	9.57	10.24	11.79	10.18	8.23	5.77	---	6.31	6.45	9.96	11.39
LOW	6.88	9.69	10.29	11.83	11.96	10.64	8.61	6.51	6.36	6.58	10.15	11.81
HIGH	6.67	6.86	9.68	10.29	10.18	8.04	5.77	5.89	6.11	6.33	5.98	10.17

WTR YR 1984 HIGH 5.77 APR 30 LOW 11.96 FEB 9, 10

ORANGE COUNTY

383702086215601. Local number, OR 2.

LOCATION.--Lat 38°37'02", long 86°21'56", in NE¼SE¼SE¼ sec.11, T.2 N., R.1 E., Orange County, Hydrologic Unit 05120208, on property of Paul Middletown Farm, 6.6 miles southeast of Orleans.
Owner: Paul Middletown.

AQUIFER.--Limestone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 108 ft, cased to 56 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 712 ft. Measuring point: Top of floor of shelter 3.30 ft above land-surface datum.

PERIOD OF RECORD.--October 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.59 ft below land-surface datum, May 15, 1983; lowest, 44.44 ft below land-surface datum, Jan. 29, 1981.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	39.24	26.32	12.08	26.71	25.28	17.15	11.69	---	26.37	---	33.65	40.31
10	41.38	28.75	15.41	26.78	30.16	21.03	15.56	9.38	29.90	---	35.90	40.61
15	40.94	30.69	12.19	27.96	22.24	21.63	19.40	12.36	---	24.41	37.41	41.02
20	39.26	27.56	17.44	30.02	23.87	12.68	23.04	16.44	30.60	26.67	38.51	41.65
25	17.53	16.64	20.88	27.33	24.56	13.37	---	22.07	31.39	29.35	39.43	39.21
EOM	24.21	10.59	25.77	26.97	24.99	12.55	---	25.54	32.35	32.04	40.03	40.94
LOW	42.00	32.25	26.10	31.22	33.90	25.68	23.85	25.93	32.71	33.83	40.12	42.14
HIGH	16.19	9.74	11.45	25.01	21.89	10.66	9.45	8.22	25.88	22.45	32.36	39.15

WTR YR 1984 HIGH 9.45 APR 21 LOW 42.14 SEP 21

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PARKE COUNTY

393619087043001. Local number, PA 6.

LOCATION.--Lat 39°36'19", long 87°04'30", in SE¼SW¼SE¼ sec.33, T.14 N., R.6 W., Parke County, Hydrologic Unit 05120111, on county right of way on north side of Parke-Clay county line road, 1.7 mi east of Carbon, 2.6 mi east of State Highway 59, and 6.2 mi north of Brasil.
Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 155 ft, cased to 46 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 703 ft. Measuring point: Top of casing 2.40 ft above land-surface datum.

PERIOD OF RECORD.--July 1967 to August 1971. October 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.53 ft below land-surface datum, Apr. 19, 1970; lowest, 16.37 ft below land-surface datum, Oct. 17, 19, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.12	16.14	15.69	14.57	14.34	14.09	13.52	13.41	13.48	14.02	14.90	15.88
10	16.26	15.95	15.61	14.69	14.43	14.11	13.72	13.37	13.60	14.17	15.02	15.84
15	16.29	15.98	15.30	14.66	14.51	13.89	13.54	13.49	13.72	14.42	15.25	15.98
20	16.19	15.79	15.32	14.68	14.43	13.84	13.66	13.40	13.79	14.57	15.38	15.97
25	16.19	16.06	15.07	14.46	14.38	13.76	13.46	13.32	13.93	14.76	15.61	16.03
EOM	16.20	16.01	14.92	14.47	14.21	13.81	13.36	13.43	14.02	14.80	15.70	16.13
LOW	16.37	16.28	16.07	14.97	14.66	14.25	13.84	13.59	14.08	14.84	15.75	16.19
HIGH	16.07	15.79	14.84	14.31	14.14	13.60	13.36	13.28	13.41	14.02	14.80	15.74

WTR YR 1984 HIGH 13.28 MAY 3, 4 LOW 16.37 OCT 17, 19

POSEY COUNTY

380758087551001. Local number, PY 3.

LOCATION.--Lat 38°07'58", long 87°55'10", in NW¼NW¼SW¼ sec.31, T.4 S., R.13 W., Posey County, Hydrologic Unit 05120113, on property of the New Harmony Park Board, at the east edge of New Harmony.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 58 ft, cased to 54 ft, screened to 56 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 380 ft. Measuring point: Top of floor of shelter 3.00 ft above land-surface datum.

REMARKS.--Water level affected by Wabash River floods.

PERIOD OF RECORD.--April 1967 to September 1971. September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.95 ft below land-surface datum, May 14, 1983; lowest, 21.25 ft below land-surface datum, Feb. 15-20, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.40	18.78	17.60	16.12	16.74	14.11	8.33	6.99	10.57	13.92	16.12	17.73
10	18.54	18.88	17.14	16.34	16.64	13.82	8.41	7.61	11.16	14.24	16.39	17.94
15	18.70	18.99	16.45	16.51	15.87	13.77	8.20	8.70	11.97	14.60	16.67	18.16
20	18.84	19.06	15.83	16.75	15.26	11.03	8.91	9.37	12.61	15.00	16.93	18.34
25	18.85	18.90	15.55	16.99	14.83	9.94	7.31	10.05	12.95	15.40	17.19	18.52
EOM	18.72	18.21	15.98	16.97	14.70	8.57	6.89	10.24	13.48	15.82	17.48	18.63
LOW	18.88	19.12	18.21	17.01	16.99	14.78	9.03	10.31	13.58	15.87	17.53	18.66
HIGH	18.28	18.21	15.55	16.02	14.67	8.57	6.76	6.71	10.28	13.59	15.87	17.53

WTR YR 1984 HIGH 6.71 MAY 4 LOW 19.17 NOV 22

POSEY COUNTY

380638087471901. Local number, PY 4.

LOCATION.--Lat 38°06'38", long 87°47'19", in NW¼NW¼NW¼ sec.8, T.5 S., R.12 W., Posey County, Hydrologic Unit 05120113, 0.6 mi north of Wadesville.
Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 280 ft, cased to 200 ft, open hole.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 458 ft from topographic map. Measuring point: Top of floor of shelter 2.00 ft above land-surface datum.

REMARKS.--Water level affected by pumpage from feed lot.

PERIOD OF RECORD.--November 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 112.99 ft below land-surface datum, Apr. 2, 1979; lowest, 139.75 ft below land-surface datum, Aug. 25, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	129.87	128.76	128.26	128.27	127.54	126.40	124.38	124.02	125.24	127.73	131.56	131.45
10	130.12	128.46	128.33	127.92	127.54	125.90	124.56	124.06	126.60	127.79	132.05	131.43
15	129.59	128.08	127.60	127.79	127.74	125.82	124.56	125.20	127.82	128.68	132.84	131.21
20	129.30	128.35	128.01	127.83	127.46	125.02	124.34	125.64	127.96	129.53	131.75	130.97
25	129.56	128.73	128.16	127.39	127.00	124.67	123.97	125.70	128.39	130.69	131.44	131.06
EOM	129.34	128.67	128.79	---	126.86	124.79	124.09	125.24	128.53	130.70	131.57	130.60
LOW	133.00	131.60	131.62	132.12	133.65	128.70	126.27	133.57	133.11	137.53	138.18	137.01
HIGH	128.93	128.08	127.60	127.37	126.36	124.38	123.85	124.02	125.24	127.64	130.47	130.58

WTR YR 1984 HIGH 123.85 APR 23 LOW 138.18 AUG 11

PULASKI COUNTY

405916086530701. Local number, PU 6.

LOCATION.--Lat 40°59'16", long 86°53'07", in NW¼SE¼SW¼ sec.4, T.29 N., R.4 W., Pulaski County, Hydrologic Unit 05120106, on private property at the north edge of Francesville.
Owner: Earl Overmeyer.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 8 in, depth 663 ft, cased to 11 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 678.60 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 3.00 ft above land-surface datum.

REMARKS.--Water level affected by pumpage and earthquakes.

PERIOD OF RECORD.--July 1956 to February 1971. January 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.03 ft below land-surface datum, June 15, 1958; lowest, 20.69 ft below land-surface datum, Oct. 9, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.55	18.76	16.42	12.90	14.30	11.06	11.03	11.44	---	13.89	16.29	19.06
10	19.85	18.74	14.84	13.66	14.07	11.67	10.42	11.55	---	14.41	16.85	19.16
15	20.08	19.02	12.21	14.00	11.40	11.73	10.58	12.09	12.25	14.71	17.37	19.70
20	20.09	18.60	12.25	14.30	10.54	9.67	11.08	11.83	12.75	15.46	17.81	19.80
25	19.15	18.79	12.07	14.20	10.69	9.43	9.95	11.17	12.97	15.72	18.23	19.98
EOM	18.77	17.56	13.16	14.85	11.00	10.00	10.04	---	13.60	15.83	18.67	20.34
LOW	20.69	19.98	17.57	14.97	14.93	12.21	12.45	12.33	13.99	16.19	18.98	20.50
HIGH	18.77	17.56	11.87	12.90	10.34	8.95	9.88	10.68	11.98	13.67	15.99	18.71

WTR YR 1984 HIGH 8.95 MAR 28 LOW 20.69 OCT 9

PULASKI COUNTY

410739086365201. Local number, PU 7.

LOCATION.--Lat 41°07'39", long 86°36'52", in NE¼NE¼NW¼ sec.23, T.31 N., R.2 W., Pulaski County, Hydrologic Unit 05120106, in the Winamac State Fish and Game Area, 0.8 mi southwest of Beardstown.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 105 ft, cased to 98 ft, screened to 100 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 715.26 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.50 ft above land-surface datum.

PERIOD OF RECORD.--August 1967 to September 1971, September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.69 ft below land-surface datum, June 15, 1981; lowest, 11.66 ft below land-surface datum, Dec. 2, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.19	11.44	11.03	10.03	10.42	9.16	8.00	7.90	7.40	8.80	9.75	10.63
10	11.25	11.46	10.82	10.17	10.39	9.35	8.14	8.04	7.76	9.07	9.88	10.70
15	11.32	11.51	10.36	10.24	9.48	9.39	---	8.22	8.11	9.21	10.07	10.82
20	11.35	11.50	10.10	10.33	9.12	8.90	8.08	8.09	8.30	9.46	10.18	10.88
25	11.36	11.56	10.03	10.36	9.11	---	7.67	---	8.33	9.61	10.37	10.98
EOM	11.40	11.36	10.06	10.49	9.14	8.07	7.64	---	8.65	9.70	10.53	11.07
LOW	11.44	11.60	11.35	10.52	10.50	9.49	8.19	8.32	8.69	9.75	10.59	11.08
HIGH	11.13	11.36	9.98	10.03	9.05	7.96	7.64	7.81	7.40	8.68	9.73	10.55

WTR YR 1984 HIGH 7.40 JUN 5 LOW 11.60 NOV 24

PUTNAM COUNTY

393254086590401. Local number, PN 4.

LOCATION.--Lat 39°32'54", long 86°59'04", in NW¼SW¼SE¼ sec.20, T.13 N., R.5 W., Putnam County, Hydrologic Unit 05120203, in the well field of Brazil Water Works about 8.0 mi east of Brazil.
Owner: Brazil Water Company.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 12 in, depth 60 ft, cased to 20 ft, slotted to 60 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 612 ft. Measuring point: Top of floor of shelter 1.82 ft above land-surface datum.

REMARKS.--Water level affected by Big Walnut Creek, and by pumpage from municipal well field.

PERIOD OF RECORD.--July 1957 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.20 ft below land-surface datum, Apr. 9, 1961; lowest, 19.95 ft below land-surface datum, Jan. 15-25, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.66	18.35	16.91	17.71	17.10	17.65	15.32	15.22	17.08	17.90	18.40	18.68
10	18.57	18.48	16.41	17.79	17.77	17.68	15.63	15.63	17.54	17.91	18.64	18.78
15	18.66	18.27	14.10	17.67	16.04	18.04	16.20	16.29	17.60	18.24	18.61	18.77
20	18.69	18.32	15.95	18.12	16.82	14.14	15.95	16.99	17.97	---	18.84	18.93
25	18.13	17.58	16.65	18.40	17.10	14.23	12.81	16.62	17.77	18.73	18.71	18.79
EOM	18.42	16.86	17.30	18.20	17.40	15.08	14.63	16.62	17.85	18.20	18.94	18.68
LOW	19.37	19.10	17.85	19.09	18.85	18.65	16.83	17.56	18.83	19.14	19.68	19.75
HIGH	18.00	16.80	13.42	17.39	16.04	13.70	11.53	14.83	16.68	17.62	18.30	18.55

WTR YR 1984 HIGH 11.53 APR 23 LOW 19.75 SEP 22

RANDOLPH COUNTY

401532085085301. Local number, Ra 3.

LOCATION.--Lat 40°15'32", long 85°08'53", in NE¼NE¼SE¼ sec.23, T.21 N., R.12 E., Randolph County, Hydrologic Unit 05120103, at the east edge of Purdue University Agriculture Experiment Station, about 5.5 mi north of Farmland.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 54 ft, cased to 33 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 970 ft. Measuring point: Top of floor of shelter 3.86 ft above land-surface datum.

PERIOD OF RECORD.--October 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.84 ft below land-surface datum, June 6, 1981; lowest, 15.00 ft below land-surface datum, Feb. 10, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.73	13.61	10.29	10.93	11.07	9.96	8.76	9.84	10.06	11.34	12.31	13.28
10	14.73	13.37	10.43	11.39	10.91	9.88	9.22	10.20	10.57	11.14	12.52	13.27
15	14.68	12.49	9.58	11.56	10.44	9.70	9.41	10.21	11.04	11.48	12.81	13.46
20	14.53	11.77	10.30	11.67	10.21	8.54	9.02	10.21	11.31	11.80	12.81	13.52
25	13.87	11.40	10.50	11.57	10.15	8.65	8.65	9.61	11.52	11.99	12.92	13.61
EOM	13.86	10.99	11.05	11.78	9.90	9.34	9.08	9.61	11.77	12.18	13.19	13.58
LOW	14.93	13.32	11.16	11.84	11.79	10.26	9.54	10.39	11.84	12.20	13.23	13.81
HIGH	13.73	10.74	9.39	10.93	9.64	8.50	8.11	9.47	9.66	11.14	12.20	13.17

WTR YR 1984 HIGH 8.11 APR 22 LOW 14.93 OCT 6

ST JOSEPH COUNTY

414138086265101. Local number, SJ 30.

LOCATION.--Lat 41°41'38", long 86°26'51", in SW¼SW¼SW¼ sec.32, T.38 N., R.1 E., St. Joseph County, Hydrologic Unit 07120001, 4.1 mi southeast of New Carlisle.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 5 in, depth 87.5 ft, cased to 83.3 ft, screened to 87.5ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 737 ft. Measuring point: Top of floor of shelter 3.20 ft above land-surface datum.

PERIOD OF RECORD.--May 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.50 ft below land-surface datum, Mar. 20, 1982; lowest, 9.73 ft below land-surface datum, Dec. 9-12, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.22	9.50	9.70	9.35	9.57	7.69	7.01	6.31	6.14	6.60	8.19	8.96
10	9.28	9.53	9.73	9.39	9.57	7.84	7.21	6.44	6.33	6.91	8.33	9.05
15	9.33	9.58	9.60	9.43	8.63	7.95	7.25	6.70	6.53	7.19	8.43	9.13
20	9.37	9.60	9.46	9.46	7.91	7.61	7.24	6.85	6.73	7.48	8.53	9.21
25	9.41	9.64	9.39	9.49	7.70	7.31	6.20	6.43	6.22	7.76	8.67	9.28
EOM	9.46	9.68	9.35	9.54	7.66	7.06	6.03	6.04	6.37	8.01	8.83	9.32
LOW	9.47	9.68	9.73	9.54	9.59	8.03	7.31	6.97	6.83	8.04	8.87	9.33
HIGH	9.17	9.47	9.35	9.34	7.63	7.04	6.03	6.04	6.03	6.42	8.05	8.87

WTR YR 1984 HIGH 6.03 APR 29,30, JUN 1 LOW 9.73 DEC 9-12

SHELBY COUNTY

393943085490901. Local number, SH 2.

LOCATION.--Lat 39°39'43", long 85°49'09", in SW¼SW¼NW¼ sec.13, T.14 N., R.6 E., Shelby County, Hydrologic Unit 05120204, on the county right of way at the intersection of County Roads 950 North and 200 West, 3.0 mi south of Carrollton.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 150 ft, cased to 128 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 816.10 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 3.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.90 ft below land-surface datum, May 27, 1968; lowest, 22.65 ft below land-surface datum, Feb. 7, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.10	21.62	18.50	19.17	19.53	18.80	17.50	17.90	18.84	19.54	20.17	21.06
10	22.25	21.40	18.54	19.52	19.67	18.43	17.68	18.00	19.14	19.74	20.29	21.05
15	22.23	20.32	17.56	19.75	19.02	18.43	17.98	18.37	19.35	19.94	20.53	21.16
20	22.12	19.88	18.22	19.92	18.89	17.08	17.94	18.53	19.51	20.19	20.66	21.19
25	21.60	19.25	18.57	19.87	18.94	16.97	16.62	18.24	19.26	20.35	20.82	21.21
EOM	21.59	18.73	19.14	20.03	18.72	17.57	17.23	18.55	19.40	20.02	20.97	21.14
LOW	22.30	21.73	19.17	20.06	20.06	18.97	18.03	18.61	19.55	20.40	21.03	21.37
HIGH	21.49	18.70	17.49	19.15	18.59	16.92	16.59	17.53	18.59	19.45	20.08	20.99

WTR YR 1984 HIGH 16.59 APR 24 LOW 22.30 OCT 9, 10

STARKE COUNTY

411342086365601. Local number, SK 2.

LOCATION.--Lat 41°13'42", long 86°36'56", in NW¼NE¼NW¼ sec.14, T.32 N., R.2 W., Starke County, Hydrologic Unit 07120001, on private property in the southeast angle of intersection of U.S. Highway 35 and County Road 500 South, and 5.0 mi south of Knox.
Owner: Samuel A. Craigmile.

AQUIFER.--Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 85 ft, cased to 77 ft, screened to 85 ft.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 712.97 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 3.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1935 to December 1952 (random instantaneous measurements only), August 1963 to October 1966, June 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.83 ft below land-surface datum, June 17, 1949; lowest, 6.99 ft below land-surface datum, Aug. 2, 1939.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.94	5.82	5.19	5.13	5.15	4.74	3.94	4.71	---	5.36	5.82	6.13
10	5.98	5.81	5.10	5.25	5.16	4.88	4.39	4.96	---	5.54	5.90	5.88
15	6.00	5.81	4.50	5.30	4.10	4.42	4.65	5.12	4.99	5.69	5.94	5.94
20	5.98	5.80	4.85	5.36	4.31	3.67	4.60	4.97	5.17	5.87	5.95	5.97
25	5.78	5.80	4.97	5.38	4.53	3.57	4.23	---	4.82	5.84	6.03	5.97
EOM	5.81	5.35	5.11	5.45	4.63	3.99	4.51	---	5.18	5.94	6.11	6.37
LOW	6.02	5.85	5.43	5.47	5.46	4.99	4.72	5.24	5.26	5.98	6.14	6.39
HIGH	5.68	5.28	4.48	5.12	4.04	3.57	3.94	4.58	4.79	5.23	5.80	5.88

WTR YR 1984 HIGH 3.57 MAR 25,26 LOW 6.39 SEP 30

STARKE COUNTY

411419086340401. Local number, SK 12.

LOCATION.--Lat 41°14'19", long 86°34'04", in NW¼SE¼NE¼ sec.7, T.32 N., R.1 W., Starke County, Hydrologic Unit 07120001, in the Bass Lake State Fish Hatcheries on the northeast shore of the lake, 5.0 mi southeast of Knox. Owner: State of Indiana.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2.0 in, depth 17 ft, cased to 15 ft, screened to 17 ft. Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 717.02 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.30 ft above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.34 ft below land surface datum, June 13, 14, 1981; lowest, 3.31 ft below land-surface datum, Jan. 12, 13, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.36	2.04	---	2.49	2.27	2.40	2.18	2.22	1.20	1.34	1.39	1.69
10	1.49	---	---	2.54	2.22	2.49	2.40	2.39	.83	1.43	1.49	1.32
15	1.56	---	2.06	2.57	1.99	1.83	2.27	2.40	1.02	1.47	1.58	1.46
20	1.68	---	2.40	2.60	2.22	1.85	2.28	1.47	1.21	1.54	1.59	1.51
25	1.40	---	2.48	2.69	2.36	1.95	2.15	.60	1.01	1.28	1.67	1.54
EOM	1.71	---	2.53	2.61	2.39	2.29	2.19	.98	1.24	1.40	1.71	1.56
LOW	1.76	2.19	2.54	2.69	2.62	2.57	2.45	2.48	1.29	1.59	1.73	1.73
HIGH	1.32	1.72	2.05	2.49	1.68	1.63	1.80	.59	.70	1.14	1.37	1.32

WTR YR 1984 HIGH .59 MAY 26 LOW 2.69 JAN 23-25

STARKE COUNTY

411255086364501. Local number, SK 13.

LOCATION.--Lat 41°12'55", long 86°36'45", in NE¼NE¼NW¼ sec.23, T.32 N., R.2 W., Starke County, Hydrologic Unit 07120001, on state property in the public parking area at the west end of Bass Lake, at Bass Lake. Owner: State of Indiana.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 3.0 in, depth 13 ft, cased to 11 ft, screened to 13 ft. Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 714.07 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.20 ft above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.77 ft below land-surface datum, June 12, 1981; lowest, 3.40 ft below land-surface datum, Sept. 11, 12, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.85	2.70	1.98	2.43	2.19	2.35	1.99	1.96	2.10	2.32	2.48	2.78
10	2.89	2.70	2.26	2.47	2.09	2.37	2.19	2.17	2.22	2.44	2.58	2.25
15	2.88	2.67	2.10	2.48	2.00	1.53	2.09	2.18	2.08	2.50	2.69	2.42
20	2.80	2.51	2.38	2.50	2.17	1.68	2.04	1.71	2.24	2.58	2.73	2.54
25	2.61	2.56	2.43	2.51	2.28	1.73	1.89	1.30	2.03	2.36	2.74	2.55
EOM	2.75	2.32	2.46	2.49	2.32	2.10	1.87	1.85	2.24	2.50	2.79	2.57
LOW	2.94	2.75	2.48	2.51	2.49	2.39	2.22	2.30	2.40	2.71	2.83	2.83
HIGH	2.22	1.91	1.72	2.43	1.69	1.52	1.56	1.30	1.87	2.10	2.35	2.22

WTR YR 1984 HIGH 1.30 MAY 25 LOW 2.94 OCT 7

GROUND-WATER LEVELS

STARKE COUNTY

411225086353901. Local number, SK 14

LOCATION.--Lat 41°12'25", long 86°35'39", in NE¼NE¼SW¼ sec.24, T.32 N., R.2 W., Starke County, Hydrologic Unit 07120001, in southeast corner of intersection of State Highway 10 and Beach Street in Bass Lake.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2.0 in, depth 24 ft, cased to 21 ft, screened to 24 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 717 ft. Measuring point: Top of floor of shelter 3.10 ft above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.21 ft below land-surface datum, June 13, 1981; lowest, 4.59 ft below land-surface datum, Dec. 8, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.87	3.54	2.53	3.02	2.83	2.75	2.08	2.17	2.39	2.95	3.21	3.79
10	3.94	3.58	2.83	3.06	2.76	2.83	2.39	2.43	2.67	3.12	3.39	3.31
15	3.87	3.54	2.44	3.06	2.29	1.36	2.25	2.54	2.64	3.22	3.55	3.55
20	3.83	3.39	2.64	3.08	2.53	1.70	2.22	1.83	2.89	3.38	3.56	3.66
25	3.46	3.32	2.89	3.14	2.67	1.69	2.07	.98	2.65	3.05	3.68	3.69
EOM	3.62	2.91	3.03	3.16	2.72	2.23	2.17	1.99	2.87	3.20	3.82	3.72
LOW	3.99	3.63	3.07	3.16	3.16	2.88	2.43	2.71	3.04	3.54	3.90	3.90
HIGH	3.23	2.59	2.12	3.02	1.86	1.32	1.46	.98	2.08	2.80	3.15	3.31

WTR YR 1984 HIGH .98 MAY 25 LOW 3.99 OCT 7, 8

TIPPECANOE COUNTY

402543086533401. Local number, TC 4.

LOCATION.--Lat 40°25'43", long 86°53'34", in NE¼SW¼NE¼ sec.20, T.23 N., R.4 W., Tippecanoe County, Hydrologic Unit 05120108, on flood plain of Wabash River, in the Lafayette Water Department well field at North Canal and Tippecanoe Streets in Lafayette.
Owner: Lafayette Water Department.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 12 in, depth 97 ft.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 520.9 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 15.43 ft above land-surface datum.

REMARKS.--Water level affected by Wabash River floods and by pumpage from municipal supply well field.

PERIOD OF RECORD.--April 1944 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.02 ft below land-surface datum, May 3, 1983; lowest, 40.14 ft below land-surface datum, Aug. 4, 1944.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.45	18.81	15.18	---	17.20	13.89	7.57	14.32	12.08	18.21	20.19	22.59
10	19.92	17.06	13.22	---	16.60	13.23	---	15.76	18.23	16.29	20.77	18.55
15	18.87	16.15	8.74	---	8.86	17.47	---	16.32	19.14	19.60	22.29	21.40
20	18.37	15.90	12.56	---	11.53	8.24	---	19.03	22.81	22.33	21.14	18.00
25	18.88	15.90	11.73	---	8.73	5.73	10.01	13.23	16.91	22.11	25.90	19.95
EOM	18.75	13.93	14.53	14.45	14.90	8.57	10.58	12.18	18.10	18.33	22.59	17.75
LOW	26.77	24.27	21.82	22.16	22.59	22.29	19.86	23.33	24.15	30.26	28.68	27.12
HIGH	15.36	13.93	8.74	13.56	7.10	5.48	7.57	9.11	9.68	15.04	17.77	17.46

WTR YR 1984 HIGH 5.48 MAR 27 LOW 30.26 JUL 20

VANDERBURGH COUNTY

380608087395901. Local number, VA 6.

LOCATION.--Lat 38°06'08", long 87°39'59", in SE¼SW¼NW¼ sec.8, T.5 S., R.11 W., Vanderburgh County, Hydrologic Unit 05120113, on county right of way at the intersection of Buente and New Harmony Roads, 1.0 mi southwest of Armstrong.
Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 125 ft, cased to 80 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 447 ft. Measuring point: Top of floor of shelter 3.47 ft above land-surface datum.

PERIOD OF RECORD.--May 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.88 ft below land-surface datum, Apr. 3, 4, 1968; lowest, 34.11 ft below land-surface datum, Oct.1, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	33.73	33.69	33.59	33.41	32.99	32.51	31.70	31.33	32.04	32.58	33.16	33.27
10	33.86	33.53	33.73	33.62	33.11	32.61	31.72	31.35	32.25	32.73	33.17	33.23
15	33.84	33.55	33.30	33.54	33.07	32.43	31.45	31.55	32.52	32.87	33.25	33.34
20	33.58	33.41	33.54	33.75	33.02	32.04	31.55	31.52	32.56	33.00	33.21	33.32
25	33.63	33.60	33.56	33.38	32.93	31.92	31.39	31.55	32.55	33.25	33.22	33.28
EOM	33.72	33.76	33.70	33.30	32.79	31.96	31.33	31.81	32.47	33.29	33.23	33.40
LOW	34.11	33.90	33.95	33.89	33.43	32.86	32.17	31.92	32.74	33.42	33.34	33.55
HIGH	33.47	33.26	33.19	33.07	32.60	31.58	31.32	31.16	31.80	32.49	33.08	33.15

WTR YR 1984 HIGH 31.16 MAY 3 LOW 34.11 OCT. 1

VIGO COUNTY

393201087232101. Local number, VI 6.

LOCATION.--Lat 39°32'01", long 87°23'21", in NE¼NE¼NE¼ sec.34, T.13 N., R.9 W., Vigo County, Hydrologic Unit 05120111, on property of Anaconda Industries, at the north edge of Terre Haute.
Owner: Anaconda Industries.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 138 ft, cased to 137 ft, with perforated pipe.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 511 ft. Measuring point: Top of floor of shelter 3.47 ft above land-surface datum.

PERIOD OF RECORD.--April 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 41.05 ft below land-surface datum, Apr. 5-12, 1982; lowest, 52.25 ft below land-surface datum, Nov. 15-25, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	48.09	48.65	48.57	47.16	47.43	46.62	45.53	44.11	44.64	45.44	47.04	47.63
10	48.12	48.60	48.45	47.17	47.56	46.50	45.06	44.07	44.64	45.61	47.05	47.96
15	48.26	48.66	48.21	47.17	47.60	46.55	44.62	44.13	44.70	45.81	47.08	48.02
20	48.36	48.70	47.87	47.30	47.41	46.50	44.52	44.30	44.89	46.08	47.15	48.06
25	48.41	48.56	47.47	47.30	47.03	46.29	44.34	44.44	45.27	46.62	47.28	48.09
EOM	48.56	48.64	47.28	47.28	46.81	45.75	44.10	44.69	45.45	46.85	47.52	48.10
LOW	48.62	48.76	48.66	47.39	47.61	46.81	45.75	44.69	45.50	46.87	47.54	48.10
HIGH	47.92	48.53	47.28	47.11	46.81	45.75	44.10	44.07	44.64	45.43	46.87	47.54

WTR YR 1984 HIGH 44.07 MAY 8-11 LOW 48.76 NOV 21, 22

GROUND-WATER LEVELS

VIGO COUNTY

392820087242601. Local number, VI 7.

LOCATION.--Lat 39°28'20", long 87°24'26", in SE¼SE¼NE¼ sec.21, T.12 N., R.9 W., Vigo County, Hydrologic Unit 05120111, on the campus of Indiana State University, in Terre Haute.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 70 ft, cased to 67 ft, screened to 70 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 502 ft. Measuring point: Top of floor of shelter 3.00 ft above land-surface datum.

PERIOD OF RECORD.--January 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 41.80 ft below land-surface datum, June 7, 1974; lowest, 51.90 ft below land-surface datum, Sept. 29 to Oct. 1, 1972 .

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	46.70	47.27	---	---	46.65	45.63	44.29	43.35	43.40	44.22	45.24	46.33
10	46.83	47.31	---	---	46.71	45.71	44.01	43.39	43.39	44.34	---	46.49
15	47.02	47.41	---	46.12	46.66	45.76	43.86	43.56	43.54	44.43	45.54	46.64
20	47.25	47.42	---	46.28	46.25	45.68	43.89	43.76	43.82	44.56	45.72	46.76
25	47.33	47.42	---	46.38	45.87	45.38	43.77	43.95	44.05	44.79	45.88	46.86
EOM	47.27	47.33	---	46.54	45.66	44.79	43.52	43.74	44.13	45.05	46.12	46.91
LOW	47.34	47.44	47.33	46.56	46.77	45.82	44.78	43.98	44.14	45.08	46.16	46.92
HIGH	46.63	47.25	47.28	46.06	45.66	44.79	43.52	43.34	43.36	44.14	45.09	46.16

WTR YR 1984 HIGH 43.34 MAY 6, 7 LOW 47.44 NOV 16-22, 24

VIGO COUNTY

391534087152901. Local number, VI 9.

LOCATION.--Lat 39°15'34", long 87°15'29", in SW¼SW¼SW¼ sec.36, T.10 N., R.8 W., Vigo County, Hydrologic Unit 05120111, 50 ft north of State Highway 246, behind U.S. Post Office in Lewis.
Owner: U.S. Geological Survey.

AQUIFER.--Shale and Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in, depth 201 ft, cased to 140 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 615 ft. Measuring point: Top of well casing 3.80 ft above land-surface datum.

PERIOD OF RECORD.--January 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 69.68 ft below land-surface datum, May 2, 1983; lowest, 76.00 ft below land-surface datum, Jul. 9, 1984.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5			71.75	71.87	72.31	72.18	71.85	72.11	72.45	73.19	74.10	74.54
10			71.79	72.24	72.75	72.36	72.12	72.27	72.79	74.22	74.06	74.37
15			71.57	72.15	72.43	72.21	72.04	72.73	73.09	74.58	73.87	74.40
20			71.86	72.23	72.26	72.09	72.30	72.64	73.74	73.89	73.78	74.35
25			71.94	71.95	72.01	72.22	72.26	72.09	73.86	74.32	74.06	74.22
EOM			72.15	72.05	72.69	72.43	72.17	72.25	73.13	73.88	74.14	74.29
LOW			72.74	72.67	73.28	74.00	73.73	73.68	74.64	76.00	75.01	75.30
HIGH			71.48	71.59	71.85	72.06	71.84	72.05	72.11	73.19	73.72	73.98

WTR YR 1984 HIGH 71.48 DEC 16 LOW 76.00 JUL 9

BEST COPY AVAILABLE

WAYNE COUNTY

394426085080601. Local number, WB 6.

LOCATION.--Lat 39°44'26", long 85°08'06", in SE¼NW¼NE¼ sec.24, T.15 N., R.12 E., Wayne County, Hydrologic Unit 05080003, on county right of way of Inter-state Road, 750 ft east of State Highway 1, and 4.0 mi south of East Germantown.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 49 ft, cased to 47 ft, screened to 49 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 888 ft. Measuring point: Top of collar in shelter 3.60 ft above land-surface datum.

PERIOD OF RECORD.--September 1966 to current year.

REVISED RECORDS.--WDR IN-81-1: 1980.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.07 ft below land-surface datum, Aug. 3, 1979; lowest, 21.68 ft below land-surface datum, Feb. 1, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.11	19.33	17.17	14.91	14.82	15.24	12.85	11.68	12.78	14.05	15.20	16.50
10	19.19	19.33	16.65	15.10	15.05	15.27	12.45	11.97	12.98	14.18	15.41	16.70
15	19.35	19.08	15.77	15.29	14.91	15.24	12.46	12.27	13.19	14.34	15.62	16.90
20	19.49	18.84	15.11	15.47	14.98	14.02	12.35	12.54	13.42	14.55	15.83	17.09
25	19.43	18.49	14.85	15.59	15.12	13.59	11.21	12.44	13.65	14.77	16.04	17.27
EOM	19.35	17.86	14.85	15.46	15.17	13.25	11.24	12.60	13.88	15.02	16.29	17.44
LOW	19.50	19.35	17.85	15.64	15.56	15.31	13.24	12.63	13.92	15.06	16.33	17.46
HIGH	18.99	17.86	14.79	14.85	14.82	13.25	11.15	11.38	12.63	13.92	15.06	16.33

WTR YR 1984 HIGH 11.15 APR 26, 27 LOW 19.50 OCT 20-23

WELLS COUNTY

404331085064701. Local number, WL 4.

LOCATION.--Lat 40°43'31", long 85°06'47", in SE¼NW¼NE¼ sec.12, T.26 N., R.12 E., Wells County, Hydrologic Unit 05120101, 1000 ft south of north entrance to Ouabache State Recreation Area, and 3.5 mi southeast of Bluffton.
Owner: U.S. Geological Survey.

AQUIFER.--Silty dolomite of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 79 ft, cased to 46 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 826.04 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.35 ft above land-surface datum.

PERIOD OF RECORD.--January 1967 to current year. (Semi-annual tape-down readings only September 1971 to December 1981).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 17.70 ft below land-surface datum, Apr. 4, 1973; lowest, 24.13 ft below land-surface datum, Nov. 1, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.53	23.50	22.26	22.12	22.31	21.66	20.24	20.23	20.60	21.87	22.60	23.17
10	23.60	23.29	22.26	22.48	22.38	21.75	20.13	20.47	21.10	21.85	22.69	23.02
15	23.67	23.24	21.48	22.50	21.68	21.66	20.04	20.67	21.28	22.22	22.84	23.19
20	23.61	22.78	22.21	22.68	21.58	20.28	19.98	20.61	21.48	22.37	22.92	23.06
25	23.49	22.94	22.21	22.48	21.69	20.28	19.33	20.13	21.65	22.51	23.01	23.16
EOM	23.56	22.59	22.46	22.73	21.69	20.64	19.45	20.39	21.78	22.49	23.17	23.23
LOW	23.82	24.13	22.70	22.83	22.74	22.09	20.89	21.92	21.92	22.63	23.20	23.43
HIGH	23.35	22.38	21.26	22.12	21.40	19.87	19.32	19.82	20.33	21.83	22.52	23.02

WTR YR 1984 HIGH 19.32 APR 26 LOW 24.13 NOV 1.

WHITLEY COUNTY

410337085264201. Local number, WY 3.

LOCATION.--Lat 41°03'37", long 85°26'42", in NW¼SE¼NW¼ sec.18, T.30 N., R.10 E., Whitley County, Hydrologic Unit 05120104, on the county right of way of Evergreen Road, and 0.75 mi north of Laud.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 191 ft, cased to 187 ft, screened to 191 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 870 ft. Measuring point: Top of floor of shelter 2.68 ft above land-surface datum.

PERIOD OF RECORD.--December 1966 to September 1971. August 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 49.30 ft below land-surface datum, Mar. 27, 1976; lowest, 52.67 ft below land-surface datum, Mar. 15, 1979.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	51.61	51.82	51.79	51.45	51.56	51.46	50.87	50.77	50.79	50.86	51.09	51.37
10	51.84	51.62	51.98	51.74	51.75	51.55	51.13	50.81	50.83	50.93	51.08	51.31
15	51.82	51.69	51.60	51.81	51.87	51.46	50.76	51.03	50.92	51.05	51.27	---
20	51.84	51.53	51.97	51.83	51.63	51.20	50.97	50.84	50.90	51.14	51.25	---
25	51.73	51.83	51.81	51.64	51.54	51.26	50.76	50.73	50.84	51.13	51.32	---
EOM	51.90	51.87	51.89	51.75	51.49	51.23	50.63	50.79	50.89	51.14	51.35	---
LOW	52.06	52.03	52.10	52.01	52.02	51.81	51.31	51.19	51.06	51.35	51.44	51.52
HIGH	51.55	51.53	51.47	51.45	51.38	50.94	50.63	50.65	50.72	50.85	50.98	51.23

WTR YR 1984 HIGH 50.63 APR 30 LOW 52.10 DEC 17.

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October 1, 1978

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons